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A Suburb of Medieval Ypres (Belgium)

Introduction

Excavating beyond the actual town boundaries of Ypres and calling it urban archaeology may seem a contradiction in terms. However, this is not the case. During the late Middle Ages the town covered a much bigger area and in the 14th century was even surrounded by fortification works.

In Flanders, densely populated as it is, it is very rare to find a large open space, directly associated with a town. In the case of Ypres, this was a result of the interventions of the French fortress engineer, Vauban, in the last quarter of the 17th century. He transformed the area in a zone of inundation, which means that it easily could be flooded. As a consequence, it was subsequently never built on.

In 1993 the deepening and extending of a large water basin to the south of Ypres provided the impetus for the Institute for the Archaeological Heritage of the Flemish Community to undertake rescue excavations. The basin in question gathers water from the streams which flow down the northern slopes of the hills to the south of the town. The aim is to temporarily store surplus water and assure the drinking water-supply of the town.

The excavation site lies directly to the south of Ypres, to the east of the Lille road (Rijselseweg), in an area called the *Verdronken Weiden* (the “marshy meadows”) (fig. 1).

Some historical information

As a result of the excavations being carried out, research into the area’s past was restarted by O. Mus¹.

According to the historical evidence, the site was believed to be that of the lost parish of St. Michael. This suburb was first mentioned in records dating back to before 1249 and it is known that the parish

enjoyed considerable prosperity until the middle of the 14th century. The suburb was centred around the road to Comines (Komen) and the Lys basin, the road to Mesen (later Lille, France) and on the Ieperlee, the river which gave its name to the settlement.

Three other suburbs also flourished at about the same time. The parish of Saint Cross was established to the east of the town, that of Our lady of *Ten Brieien* to the north-west and that of St. John to the north-east (fig. 2).

The roads to Belle (Bailleul, Northern France) and to Poperinge and Cassel (Northern France) were the important axes of development for the parish of Saint Cross. The course of the Ieperlee to the north of the town was essential for the growth of Our Lady of Ten Brieien. The parish of Saint John was concentrated on the roads to Diksmuide, Torhout and Brugge.

These suburbs grew up outside the 13th century town fortifications and were therefore vulnerable when Ypres was attacked. As a consequence, in the first quarter of the 14th century they were enclosed within a new defense system, which was 7,6 km long². At the same time other major public works were initiated. A number of roads were substantially improved, with their surface being raised, widened and sometimes hardened. Many important ditches were redug. Several low lying areas were raised. That all this could happen, was largely due to important political changes, which allowed representatives of the artisan class a larger say in the running of the municipality.

Historical evidence indicates that 80% of the people living in Saint Michael’s were involved in crafts. Moreover, in 1280 one fifth of all people concerned with the cloth industry around Ypres lived in this parish. The fullers trade is mentioned several times and a particular ditch is even nicknamed “the fuller’s ditch”.

¹ Honory librarian and curator of the town of Ypres. Van Bellingen, Dewilde & Mus 1993, 256-265.

² The fortification is known in the historical records as the “Uterste Veste” (the outer fortifications).

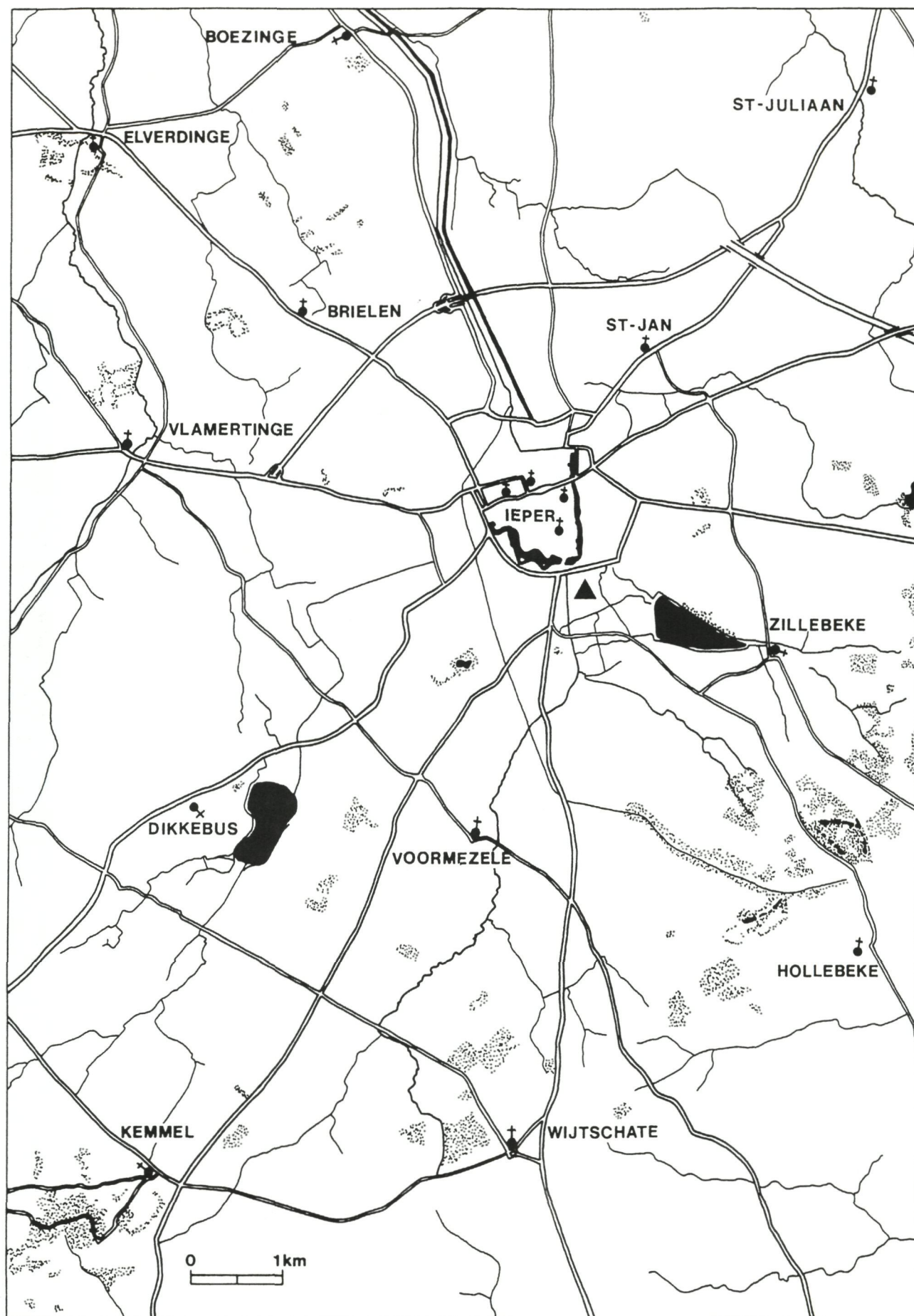
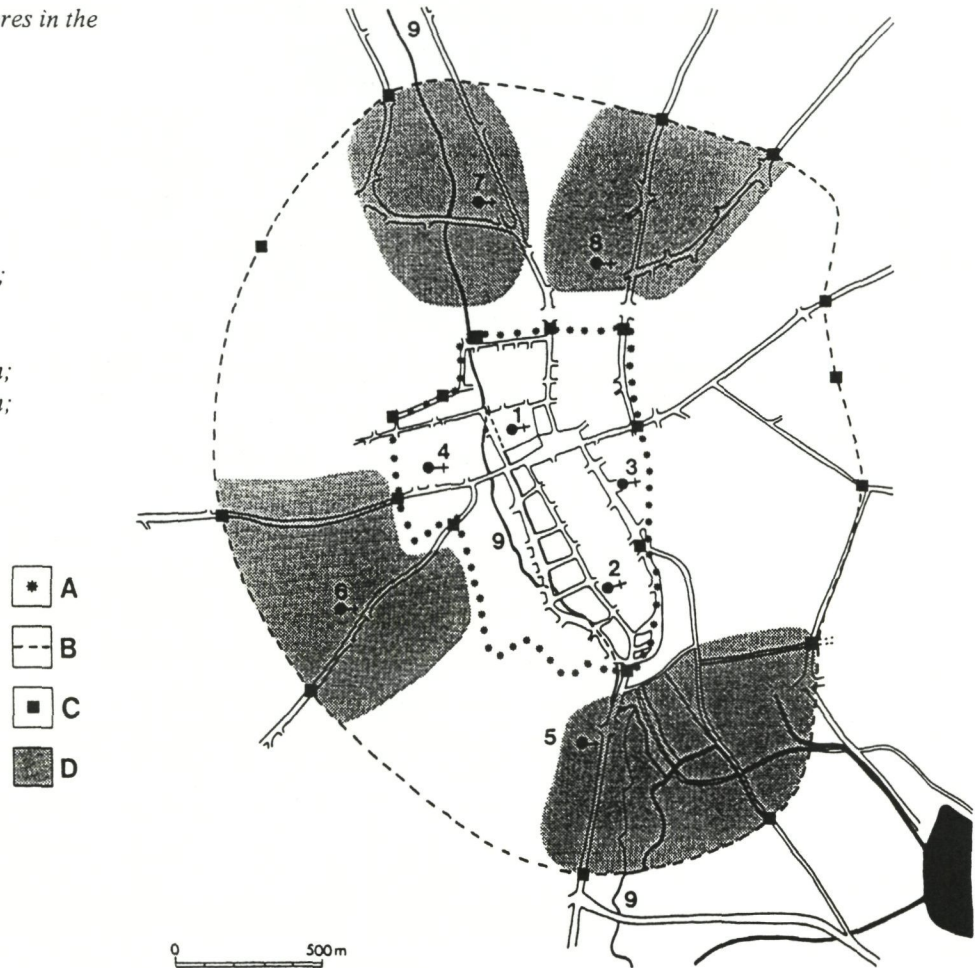


Fig. 1. - Location map: the town of Ypres and its surroundings, showing the excavation site (triangle), water-basins and forest relics.

Fig. 2. - The expansion of Ypres in the 14th century.

1. St. Martin's;
 2. St. Peter's;
 3. St. Jacob's;
 4. St. Nicholas';
 5. St. Michael's;
 6. St. Cross';
 7. Our Lady of Ten Brielen;
 8. St. John's;
 9. Ieperlee.
- A. 13th century fortification;
 B. 14th century fortification;
 C. Gateways;
 D. Suburbs.



Saint Michael's was destroyed in 1383, when the town was besieged by an English army, reinforced with levies from the city of Ghent. For strategic reasons the Count of Flanders, Philip the Bold of Burgundy, prohibited the rebuilding of the suburbs. In addition, the worsening economic situation meant that the reclaiming of the area was not a viable proposition.

Archaeological evidence : general

The archaeological evidence is varied and consists of the remains of roads, ditches, houses, workshops, fortification works, pits, fire-places, kilns, etc. A wide variety of other items has also been found, including the remnants of light fittings, furniture, clothing, weapons, toys, tools, ceramics, building implements and religious objects³.

The site is characterised by a large number of small and large ditches. These have helped ensure the good preservation of organic remains by waterlogging. Consequently, it is still possible to find wooden objects, textiles, etc. Important botanical and archaeozoological remains have also been found. Hopefully,

this will allow us to draw a relatively accurate picture of life in an artisanal suburb of medieval Ypres.

The state of preservation of the structures was not always good. The topographical conditions were not favourable to digging in housing and work facilities. Furthermore, the method of construction was not that substantial, consisting mainly of buildings on dies or half-timbered constructions above brick bases.

Sometimes the recuperation of bricks for re-use was so thorough that only a rubble trace is left. After the siege in 1383, bricks were needed to build new houses in the town and to construct a brick wall to strengthen the 13th century earthen fortifications. This probably led to the stripping of the parish at the end of the 14th century. The Saint Michael's and Saint Cross' churches were both pulled down between the 9th July and 20th August 1384⁴.

In addition, the impact of the First World War must not be overlooked. Many shell-holes are in evidence, with consequent destruction and disturbance of the archaeological remains.

³ Dewilde & Eryvnyck (eds.) 1995, 9-18.

⁴ Van Bellingen, Dewilde & Mus 1993, 262. Brussel, Kon. Bibl., Fonds Merghelynck, hs. 32, II, 103.

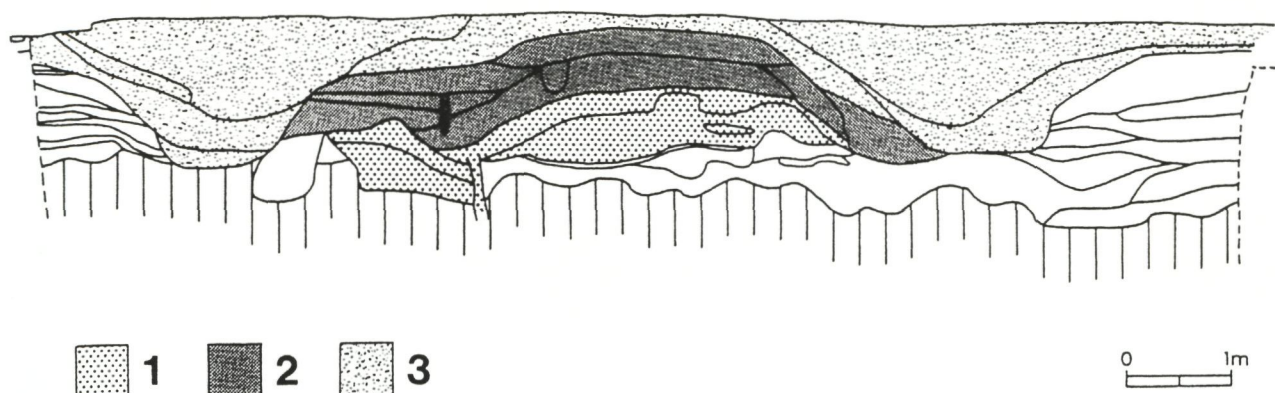


Fig. 3. - Section through the road parallel to the Ieperlee. 1. 1st half 13th century; 2. 1st quarter 14th century; 3. 16th century.

A detailed description and study of the archaeological record is not yet available. At the present time, only an initial assessment of the different kinds of structures and finds has been produced.

The fortification system

The fortification system consisted of a large ditch (18m wide, 2,5m deep) and an inner earthen rampart with a palissade. Detailed pedological research⁵ pointed to a stagnant or very slow-moving body of water. Doubtless this was a result of the division of the ditch by damming. This made it possible to keep the ditch wet in higher reaches. The many smaller ditches, which criss-cross the area, further enhanced the defensive capabilities of the 13th century fortification works. The fact that most of the parcels were surrounded by wattle-work hedges also added to the strength of the defence system⁶.

Where the fortification ditch crossed the outgoing roads, new gateways had to be built. This was also the case for the new Comines gate. Due to the organisation of the digging of the new water basin the archaeological research of this gate could not be properly carried out. As a result, only parts of the gate were documented. Nevertheless, it is clear that the main building stood on the inner side of the ditch. It was probably rectangular and measured 31m by at least 7m. On the other side of the ditch a small outer gate (6,5m x 3,5m) was found. A dyke, with the road surface on top of it, ran through the gateway. This dyke was strongly embanked with posts and planks. An interruption in both dyke and embankment suggests the presence of a draw-bridge.

The localising of the site of the new Lille gate was established during recent work on the town sewerage system⁷.

Roads

The roads were simple country roads, that ended up as streets within the walls of the town. The road to Komen, which partly disappeared in the last quarter of the 17th century, was already mentioned as early as 1216. Its course was mainly determined by the flow of the Komen stream. To the east the road was flanked by an artificially dug furrow-drain. For the last part of its route the course of the Komen stream was abandoned and the road ran into the Komen gate via the 13th century fortification works. Along this stretch of the road two artificial furrow-drains were needed. Bridges over the furrow-drains and ditches connected the houses with the street. Originally, the road was 3m wide. In 1326 it was substantially improved, with its surface being raised, widened (to 7 metres) and hardened. The hardening was carried out with cobble stones from Arras (Northern France). The bank of the Komen stream was strongly reinforced with wooden posts and planks. At one particular point an underground overflow was found, which connected the furrow-drain with the Komen stream. This overflow was built of limestone slabs.

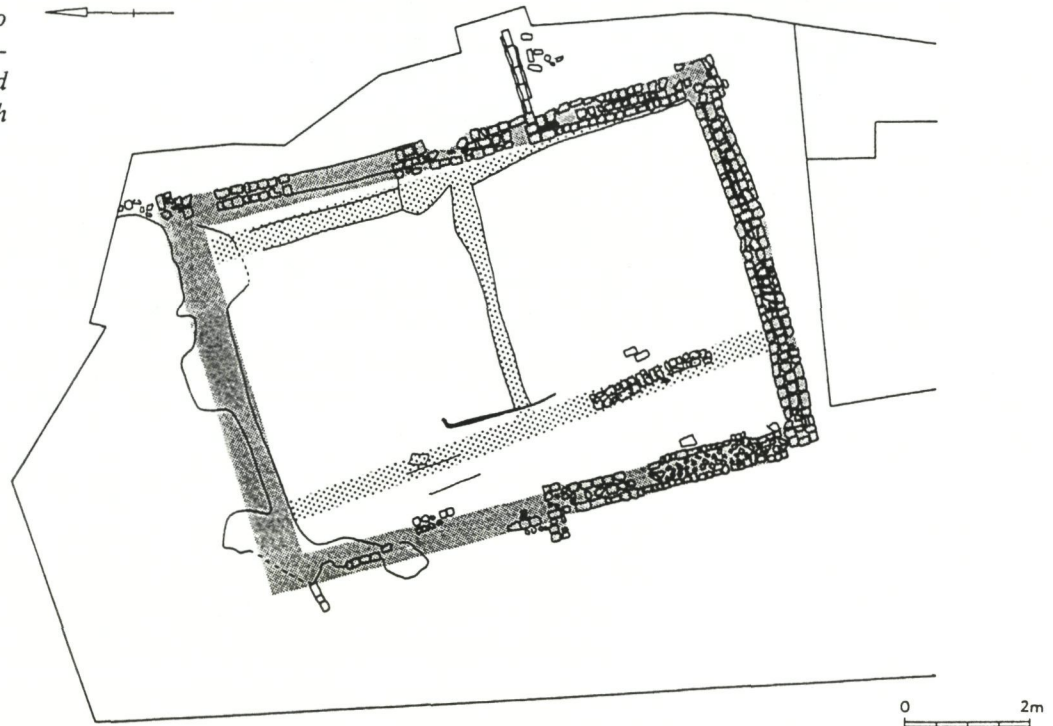
The stratigraphy of a second road shows three consecutive phases (fig. 3), which can be dated to the first half of the 13th century, the first quarter of the 14th century and the 16th century. This road is about 3,5m wide at all points. In the last two phases furrow-drains are clear. Indications of hardening are absent.

⁵ Performed by M. Pieters (Institute for the Archaeological Heritage); Van Bellinghen, Dewilde & Mus 1993, 269-270.

⁶ Mus 1997, 26.

⁷ Van Bellinghen & Dewilde 1997.

Fig. 4. - Plan of two consecutive half timbered houses (end 13th - middle 14th century).



Where the road crosses one of the branches of the Ieperlee, the piers of a bridge were found. The bridge is 2,5 m wide. An underground overflow was made partly of drainage pipes and partly of bricks. Archaeological research also indicates that ferruginous sandstone and stone-chips were used for the road surface⁸.

Houses and workshops

Other important structural evidence relates to the houses and the workshops. Two types of housing design predominated. The first type was very simple and varied in size from 9 to 11 m by 4,5 to 6 m (fig. 4). The construction was half timbered on a brick base and had a central fire-place. The second type was considerably larger and measured in the region of 15 m by 14 m (fig. 5). This second construction had a solid brick foundation and was probably two storeys high. Such houses would contain four to six separate rooms and the most important room – the hall – quite lavishly decorated, as evidenced by the remnants of an ornamental tile pavement with a central fire-place⁹.

The various workshop premises were rather more functional in design and were probably a combination of a half timbered part and a part with a roof supported by wooden posts on dies.

It would therefore seem that the main difference between houses and workshops relates to the base on which they were built. However, this distinction must not be taken too far. Even in houses with only 2 or 3

rooms, one of the rooms could have been used for an artisanal function. In this respect, the presence of different types of fire-place is particularly indicative. An example of this kind was found during the most recent excavations¹⁰. The house was built between the main course of the Ieperlee and a road, running parallel to this stream. It measures 14 m by 6 m and is subdivided into 3 rooms. A horseshoe-shaped kiln was installed in the room immediately adjacent to the stream. A large break in the wall indicates that it could be reached from outside. Both building and kiln can be dated to the first half of the 14th century.

An area along the Komen road was also examined. There, housing facilities and artisanal activities were lodged in different buildings (fig. 6). Three structures with uninterrupted bases have been identified as houses. Sometimes the bricks still lie *in situ*, sometimes only a rubble trace is left. The first example is incomplete and measures at least 4,9 m, but probably 11,5 m by 4 m. The second house is about 9,5 m long and 5,9 m wide. It contains two rooms and a passage. Part of it has been previously disturbed. The third dwelling measures 6,4 m by 3,4 m and has a central fire-place, made of bricks (0,5 m x 0,3 m). Four separate areas have been identified as workshop premises. They comprise isolated base strips, dies, rubble traces, a fire-place (consisting entirely of

⁸ Van Bellingen & Dewilde 1997.

⁹ Van Bellingen & Dewilde 1994, 156-159.

¹⁰ Dewilde & Wyffels 1997.

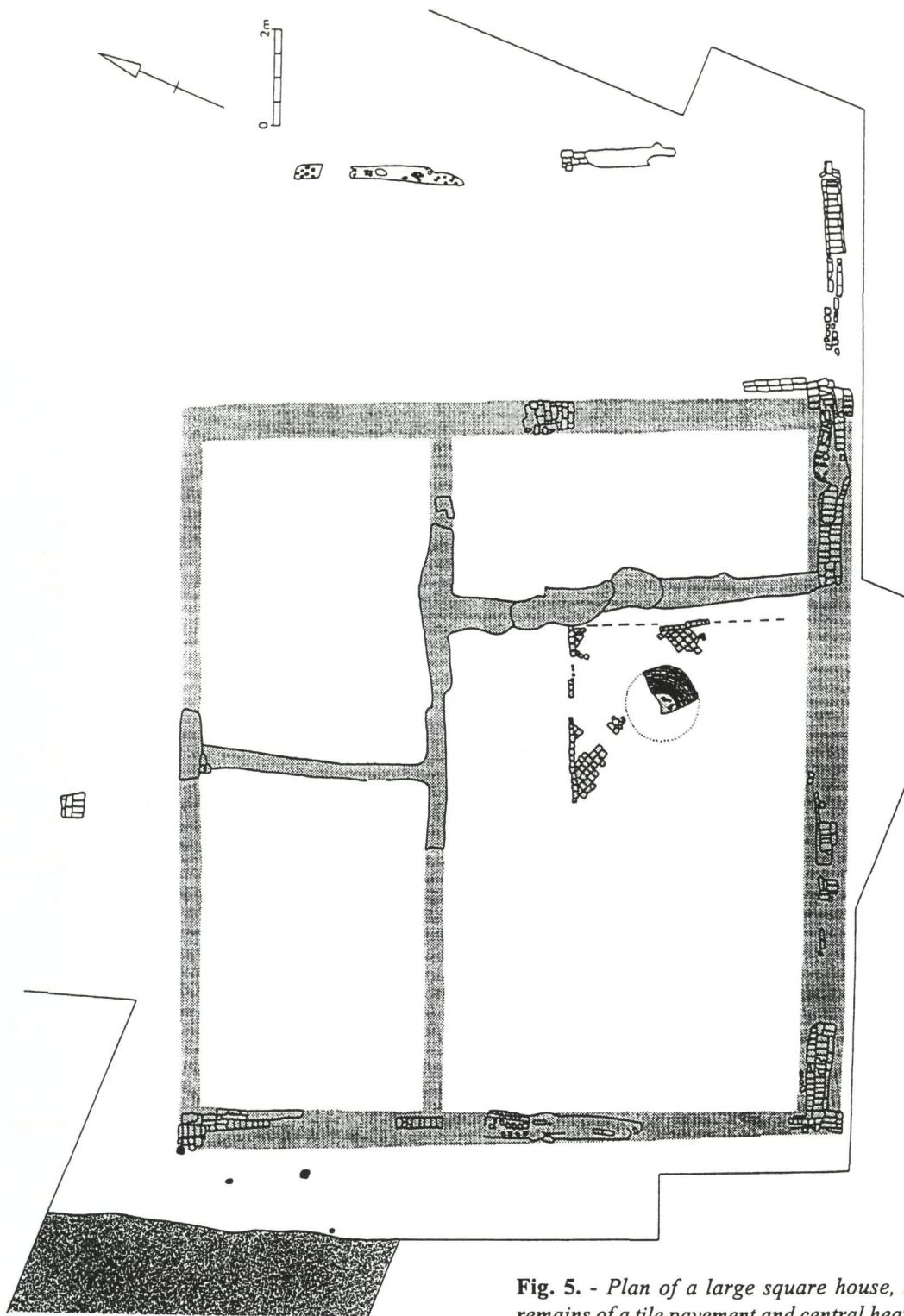


Fig. 5. - Plan of a large square house, showing in detail the remains of a tile pavement and central hearth (end 13th century).

sherds), an ash-pot, heavily burned spaces, a circular structure, ... These houses and workshops probably functioned during the first half of the 14th century.

Another important feature is the existence of large areas, which are characterised by a succession of different floor levels, which can be compared to crusts. Their colours vary from whitish grey through yellow to orange and brown. Humic layers and important charcoal deposits are also associated with them. The

dimensions of such areas are considerable. At present, the area excavated is not sufficiently large to have uncovered a complete example. Consequently only the breadth (12 m) is known. The length is at least 30 m. In these spaces large stones occur at regular distances. They can be interpreted as points of support for posts, carrying a roof. Clear ground-plans can not be discerned for the time being. Fire-places with adjacent ash-pots and a kiln are also associated

with these "crusty" areas. Samples of the crusts are currently being studied by Dr. P. Depaepe, mineralogist at the University of Ghent. The use of these artisanal spaces probably dates to the second half of the 13th century.

There are also various other structures that are related to crafts. Due to the limited area of excavation a concentration of post-holes does not present a complete ground-plan, but it seems more than probable that there was a direct relation with the practising of crafts.

Craft activities

Two kilns were found. The horseshoe-shaped example has already been mentioned. Its floor consisted of vertically placed tiles, the walls consisted of bricks. The other kiln was partly demolished by the construction of a fire-place, but was probably also horseshoe-shaped. The remaining preserved floors and walls were built of tiles. Clear traces of firing were observed here.

The excavated fire-places are of various forms and were built of different materials. Square, rectangular or round forms occur. Bricks, potsherds, roofing and floor-tiles, or a combination of all these materials were used to construct them. It seems plausible that these fire-places were associated with particular artisanal activities. However, these activities cannot be specified. Sometimes ash-pots were also discovered, nearby or at a distance. The remains of dome-shaped ventilators must most probably also be seen in relation to the use of these fire-places.

A number of large rectangular pits are probably also artisanal. They are situated behind the houses. The dimensions of one pit measured 4 m by 9 m and 2 m deep. The lowest part of the filling, some 0,65 m thick, consisted of flowing layers. This indicates that water was repeatedly brought in and let out. Later on the pit was used to dump waste. An enormous quantity of leather-cuttings was found, as well as domestic waste. Another pit measured 13 m by 5 m and was 1,8 m deep. Fullers possibly were involved with these pits. In 1281 Jan May, a fuller, rents a pond near the road to Komen. The pond is connected to the ditch and is intended to rinse the cloth¹¹

¹¹ Van Bellingen & Dewilde 1 Mus 1993, 261. Brussel, Kon. Bibl., fonds Merghelynck, hs. 90, I, 175 (akte van 19 januari 1281 ,s): "au devers le sud por faire l plankiet renablement ensi comme foulons doit avoir, la u il puist prendre ses aises el vivier pour espaulmer ses dras si que il ne puist grever il plankiet de l'autre foulerie".

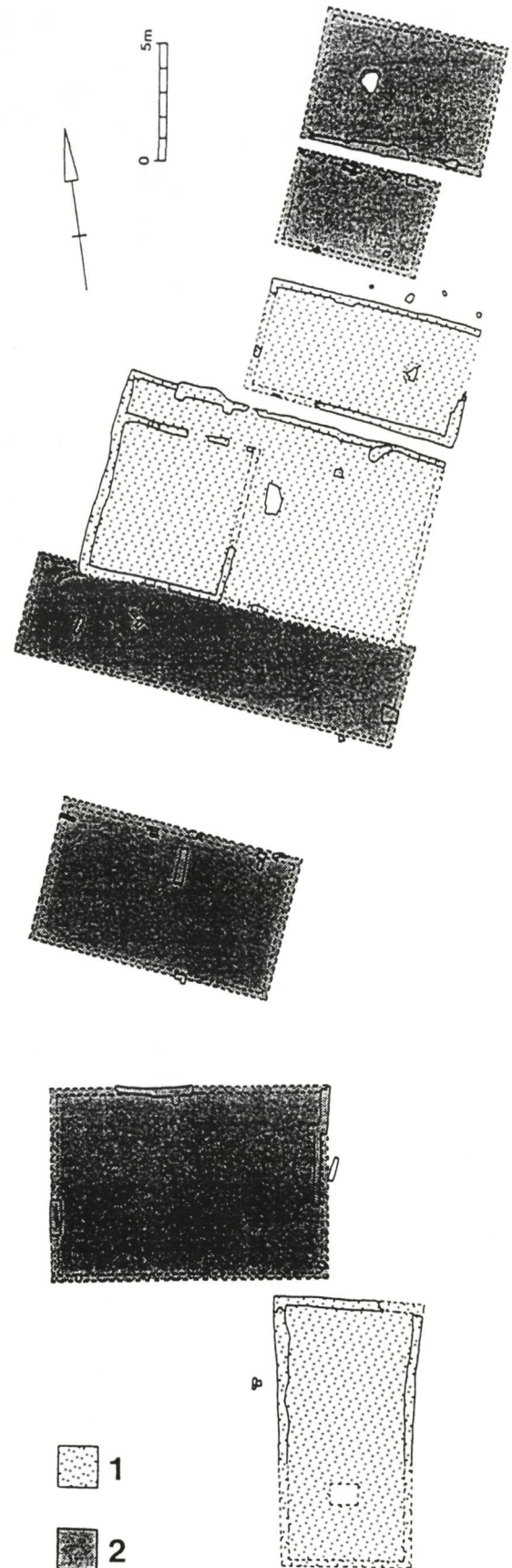


Fig. 6. - Houses and workshops adjacent to the road to Komen (1st half 14th century).

1. Houses;
2. Workshops.

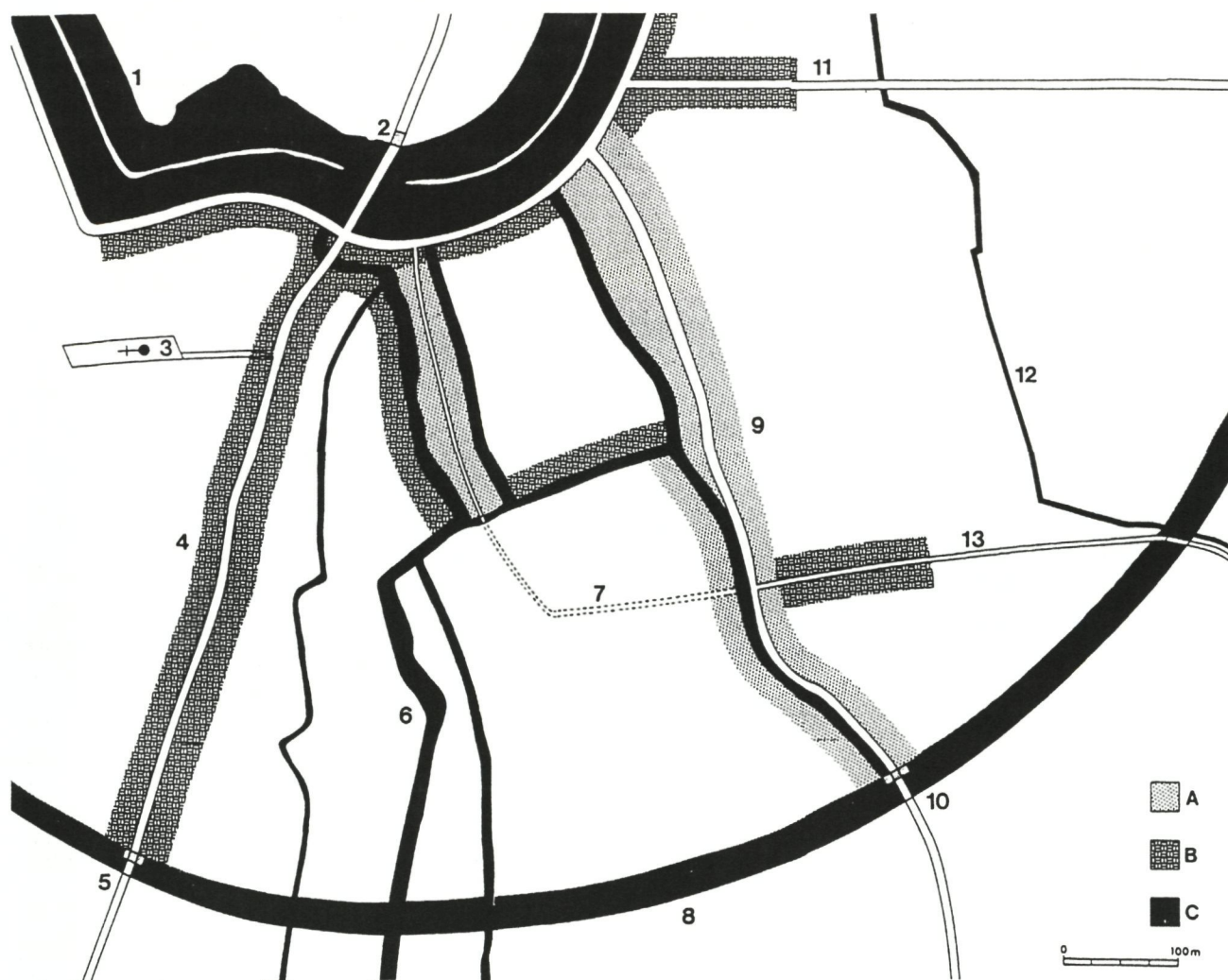


Fig. 7. - Impression of the spatial organisation in Saint Michael's.

A. Excavated area; B. Supposed area of occupation; C. Earthen rampart.

1. 13th century fortification; 2. Mesen gate (later: Lille gate); 3. Possible location of the St. Michael's church; 4. Road to Mesen (later: Lille); 5. New Mesen gate; 6. Main branch of the Ieperlee; 7. Lost medieval road; 8. 14th century fortification; 9. Lost medieval road to Komen; 10. New Komen gate; 11. Lost medieval road (Wulvestraat);

Particular structures on the water-front could also have had an artisanal function. Against the embankment of the rivers, landwards, the remnants of wooden structures are sometimes observed. They consist of wooden beams, placed perpendicular to the water-line. The distance between them was 1,05 m, 1,15 m, 1,3 m and 1,7 m. At one end they can be set into a brick pillar, at the other end between two vertical posts. The length of the beams can vary from 3 to 6 metres. The purpose of these structures is unknown, but it is plausible that they are related to a particular craft or to a particular phase in cloth production, which needed to be carried out in the neighbourhood of water.

A round brick structure, 4 m in diameter, probably also had an artisanal function.

Artisanal activities also can be deduced from all kinds of mobile finds. This is particularly true of waste products, such as leather-cuttings, iron-slugs and

waste of metal-foundries, which indicate the activities of cobblers and blacksmiths. Also significant are badly cast pennies or badges – another indication of metal-work. Waste products of the cloth industry are very rare. Wool or spinings were not found. Other pieces of fabric, dating back to the end of the 13th century, were discovered and are currently being studied, since there is some discussion as to whether the material is cloth or linen.

Tools are also useful indicators. However, specific tools, pointing directly to a single specific craft have not been found. A mortar, a pestel, scissors can all be used in various circumstances. Dome-shaped ventilators must presumably be seen in relation to the artisanal fire-places. Loom-weights and parts of a spool undoubtedly belonged to weaving looms. However, the frequent presence of loom-weights is puzzling, since these weights are associated with vertical

looms. It was widely assumed that the vertical loom was replaced by the horizontal version in the 9th or 10th century. Were the weights used for other activities? Or did the vertical loom continue to function for domestic use? A number of objects – tools or parts of tools – remain unidentified. An incomplete plank (108 cm long, 13 cm wide, 3 cm thick) is penetrated with 2 or 3 rows of holes (diam. \pm 2cm). This plank could be part of a horizontal weaving-loom. Sometimes these looms had a vertical beam or plank to their side. The holes were meant to place the shuttles for the weft¹².

Cloth seals, in many forms and sizes, point directly to the different phases in the process of cloth production. However, to this date the pictographs remain unidentified and thus cannot be related to these particular phases. However, the distribution pattern of the various seals could yet shed valuable light on the activities in particular areas.

Fortunately, the existence of artisanal activities is also supported by other evidence¹³. Besides the structural evidence, there is botanical, parasitological and chemical information from samples taken in different ditches. At many places high concentrations of teasels were found. It is self-evident that the discovery of teasels must be connected with the carding of cloth. Seeds of the weld, a dyeplant, could also be isolated. The study of mites and parasites clearly indicated wool processing and possibly fulling. Chemical

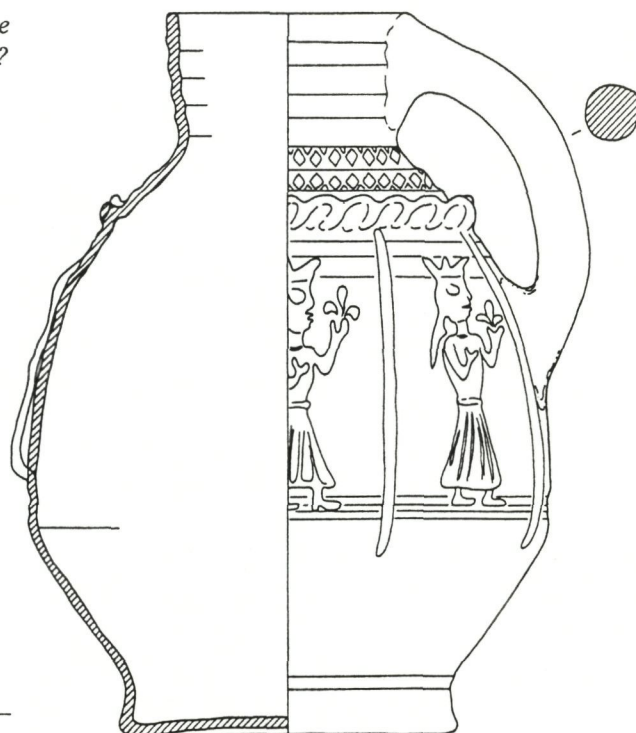
analysis of a sample taken in a branch of the Ieperlee was carried out to detect urine and nitrogen. The purpose was to establish the presence of fulling activities, since it was believed that fullers used urine during their work. The results were negative, indicating that fullers did not operate in that particular part of the stream.

Detailed historical research could also be useful. Identification of the inhabitants of the excavated houses would be extremely helpful, particularly if their occupation is also known. In this context, the registers of taxes, drawn up for the different streets, could be valuable. The deciphering of seal-matrixes to identify the users, is another possible avenue of investigation.

Spatial organisation

The topographical situation is very significant (fig. 7). In this low lying area a strongly branched network of streams ultimately formed the Ieperlee. All that water attracted craftsmen, who needed it in huge quantities for their activities. The water of Ypres was very soft (low in acidity) and therefore favourable for washing wool and for fulling cloth¹⁴. The streams determined the course of the roads. Where the roads crossed the streams bridges had to be built. The roads could also be bordered by furrow-

Fig. 8. - *Highly decorated jug. Ornamented with a frieze of 7 identical maidens. The 7 wise or the 7 foolish ones? Scale of the maiden 1:2.*



¹² Oral communication by F. Sorber.
¹³ Dewilde & Ervynck (eds.) 1995, 14.
¹⁴ Boone R. s.d., 174.

drains. Along the roads ribbons of houses and workshops developed. Bridges over the streams or furrow-drains connected the houses with the roads. It seems that until the end of the 13th century large houses and huge workshops predominated, later on replaced by small houses and workshops.

In contrast to the building pattern in the town proper, the building pattern in the suburbs is disconnected. Houses and workshops are mostly lodged in different buildings, which are not joined to each other. Both houses and workshops can be positioned with their long or short side to the roads.

Daily life

Particular aspects of daily life are sometimes clearly reflected in the finds.

Hundreds of coins indicate numerous financial transactions and a thriving economic life. Their various origins provide information about the spreading of the trade contacts. The frequency, circulation periods and possible fluctuations in coinage are also very interesting. The graphical representation of the circulation time of these coins charts the beginning, the high point and the end of the occupation of this suburb. Naturally, coins also are very useful for dating the particular structures in which they were found. Payment for completed work was made in pennies. Seal matrixes and styles are also connected with business transactions. At present, the owners of these matrixes have not been identified. Weights used to weigh bread, dyestuff, etc. also tell of economic activity.

Light fittings, ceramics, knives and wooden bowls all call domestic scenes to mind. Iron candle-holders (mural as well as free-standing) and ceramic oil-lamps occur. Occasionally animal figures carried the candle holders. A metal dog and a ceramic ram were discovered. The ceramics mostly consist of locally produced grey-wares, red-wares and highly decorated pottery. One jug was ornamented with a frieze, in which a single motif was repeated seven times (fig. 8). A female with a long skirt holds a french lily in her left hand. Her right hand is pressed to her breast. Long hair undulates on her shoulder. She wears a three-pointed hat. Special forms for use as firecovers, savings-boxes, etc. were also found. The imported pottery mainly consisted of stoneware from the Rhineland. A small amount came from the north of France and the Saintonge.

Keys, locks and iron work probably come from coffers, the most frequent piece of furniture in a medieval house. An intact wooden door, ceramic ridge-tile ornaments and ash-pots further illuminate the picture of the interior of a typical Middle Age

dwelling. Hinges, wall hooks, large clamps and a door, all from the same period, were found in a waste pit (second quarter of the 14th century). The door measures 1,45m by 0,7m and has undergone major repairs. Hybrid creatures, birds, male figures and a number of unidentified objects were amongst the various ridge-tile ornaments found. Also discovered were cooking utensils and weapons, as well as miniature animals or knights on horseback as toys for children. The adults played all kind of games with loaded bones or disks. Particular badges and ampules point to pilgrimages. Devout or penitant inhabitants of the suburb went, amongst other places, to Walsingham (England), Cologne (Germany), Noblat (France), Santiago de Compostella (Spain) and Lucca (Italy) to do their penance. Buckles, belts and belt ornaments, pins shoes and purses give information on clothing. All kinds of weapons, such as daggers, a helmet, arrow and lance-heads indicate less peaceful activities. Different tools, such as hammers, drills, saws and adzes give all kinds of insights into various domestic chores. There was also a millstone, a grinder, with a diameter of 0,6 m, but this probably was not domestic, since it is a unique specimen. Bird-whistles and net weights indicate bird-catching and fishing, as addition to the daily menu.

The absence of specific items or structures also has certain implications. Cellars, for example, were completely absent. This is no surprise, since the high level of the watertable is a well known feature in this area, both then and ... now. Nor were any cesspits discovered. Hygiene in the Middle Ages was clearly not an important priority. The discovery of one comb, some hair-pins and part of a mirror box does little to alter this general picture. In all probability the ditches must have functioned as open sewers. Wells were also conspicuous by their absence. Historical records tell of conduit-pipes leading out of the defensive moats of the town. The ground water was probably too polluted to encourage the laying-on of wells. In any event, it seems likely that all the water running through the town was polluted before its arrival, given the number of potentially polluting activities in Saint Michael's. Consequently, drinking-water was probably drawn out of a part of the defensive moat that was kept free – or freer – from pollution.

Conclusion

Four years of excavation in a suburb of a medieval metropolis has produced results that are simultaneously fascinating and disappointing.

Fascinating because of the enormous wealth of archaeological material, which the excavation has

yielded. Information has been gathered relating to houses, workshops, roads, fortifications; spatial organisation, environment, eating habits and trends in the industrial evolution. Numerous finds illustrate daily life and crafts, as well as the religious and military customs of the day. In short, a real treasure trove of valuable information; one which many archeologists can only dream about.

Disappointing because the ultimate interpretation of all this material, in particular with regard to the identification of specific crafts or particular phases in the wool processing and cloth industries, is difficult to make. The structures can only be identified in a general manner. There simply are not enough details, parts, elements, or characteristics to allow a definitive interpretation.

Consequently, it follows that there is a need for further integrated research. Information from archaeology must be supplemented by the findings of archaeozoological, botanical, chemical, parasitological and mineralogical investigations. In Ypres, this research is already under way.

It is clear that the value of the archaeological evidence and its proof quality must be enhanced by combining this evidence with information from other sources. If this happens, then there is a good chance that this excavation will succeed in reaching its ambitious goals¹⁵.

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¹⁵ Special thanks to Mr. I. Connerty for reviewing the English text. Also special thanks to Mr. F. Wyffels and Mr. M. Van Meenen (Institute for the Archaeological Heritage) who illustrated this paper with a number of excellent drawings.

Les fouilles de la rue Sous-le-Château à Huy: évolution d'un quartier médiéval

De juin 1993 à janvier 1996, des recherches préventives furent menées dans le centre ancien de la ville, par une équipe attachée à la cellule liégeoise du Service des fouilles de la Région Wallonne, sur un terrain privé destiné à la construction. Les zones menacées de cette parcelle dont la surface approche les 900 m², ont été petit à petit explorées jusqu'aux couches en place, au gré des autorisations (notamment pour l'abattage des arbres), des renouvellements de contrats et des projets de conservation; certaines parties n'ont pu être ouvertes pour des raisons de sécurité.

Huy est une petite ville coincée entre des collines, traversée par la Meuse et parcourue, sur la rive droite, par le Hoyoux dont les bras, canalisés depuis le début du Moyen Âge, ne sont plus aujourd'hui que localement apparents. Le site longe la rive gauche d'un de ces bras souterrains, au pied d'un flanc abrupt du Mont Picard, éperon rocheux fortifié depuis les temps troublés des premières invasions germaniques au III^e siècle. Il se trouve à l'intérieur de l'enceinte con-

struite lors de l'expansion de la ville à la fin du XII^e siècle, à proximité de l'église Saint-Remy.

Les quelques sondages creusés jusqu'aux niveaux géologiques montrent une différence nette entre la partie est et la partie ouest du chantier. Vers l'ouest (fig. 3, 1), la première installation repose sur un limon sableux gris-beige contenant des blocs de roche calcaire de dimensions parfois impressionnantes, couche dont l'épaisseur reste inconnue à cause de la présence des eaux souterraines. Vers l'est (fig. 3, 2), les premiers dépôts humains incrustent le sommet d'une couche très dure composée de galets agglomérés et de sable, si compacte qu'elle forme par endroits des blocs de poudingue. La couche, épaisse d'1m au moins, peut être interprétée comme un ancien fond de rivière, longée par une plage de travertin déposée à l'extérieur du méandre.

Correspondant peut-être à l'installation de vétérans romains dans la vallée du Hoyoux, signalée par l'historien André Joris¹ comme un aspect de la légende fondée sur un fait réel, une fosse isolée, creusée dans le limon contenait un ensemble de céramiques communes et sigillées du II^e ou du III^e siècle de notre ère.

Les grandes invasions du V^e siècle poussent les populations à se réfugier autour des sites fortifiés. Dès lors, Huy devient le point de passage privilégié d'une rive à l'autre de la Meuse et attire le trafic du pont romain d'Ombret, situé environ 10 km en aval sur la voie reliant Arlon à la chaussée Bavais-Cologne. Le transport par voie fluviale supplante le transport par voie terrestre et favorise l'essor des cités érigées le long du fleuve. Huy est alors une bourgade aux habitations groupées en noyaux pré-urbains éparpillés sur les deux rives et défendus par le *castrum*.

Le site de la rue Sous-le-Château présente un niveau du V^e siècle: une surface tapissée de petites

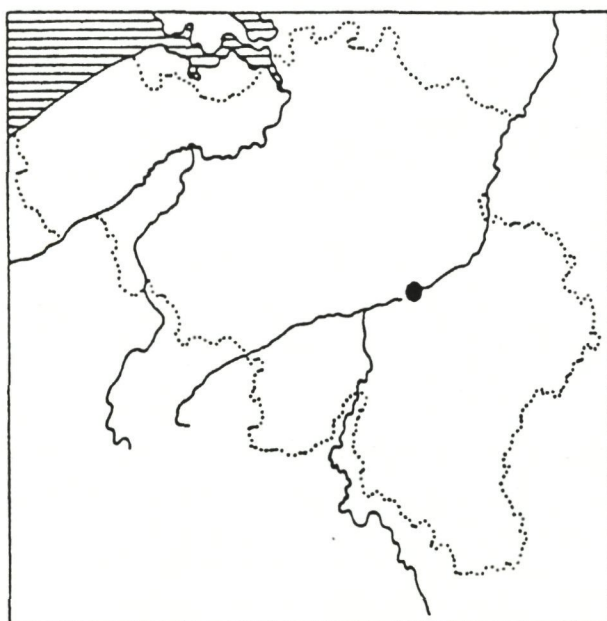


Fig. 1. - Carte de situation de Huy, le long de la Meuse.

¹ JORIS A., *La Ville de Huy au Moyen Âge. Des origines à la fin du XIV^e siècle*, Paris, 1959. Toutes les références historiques sont tirées de cet ouvrage.

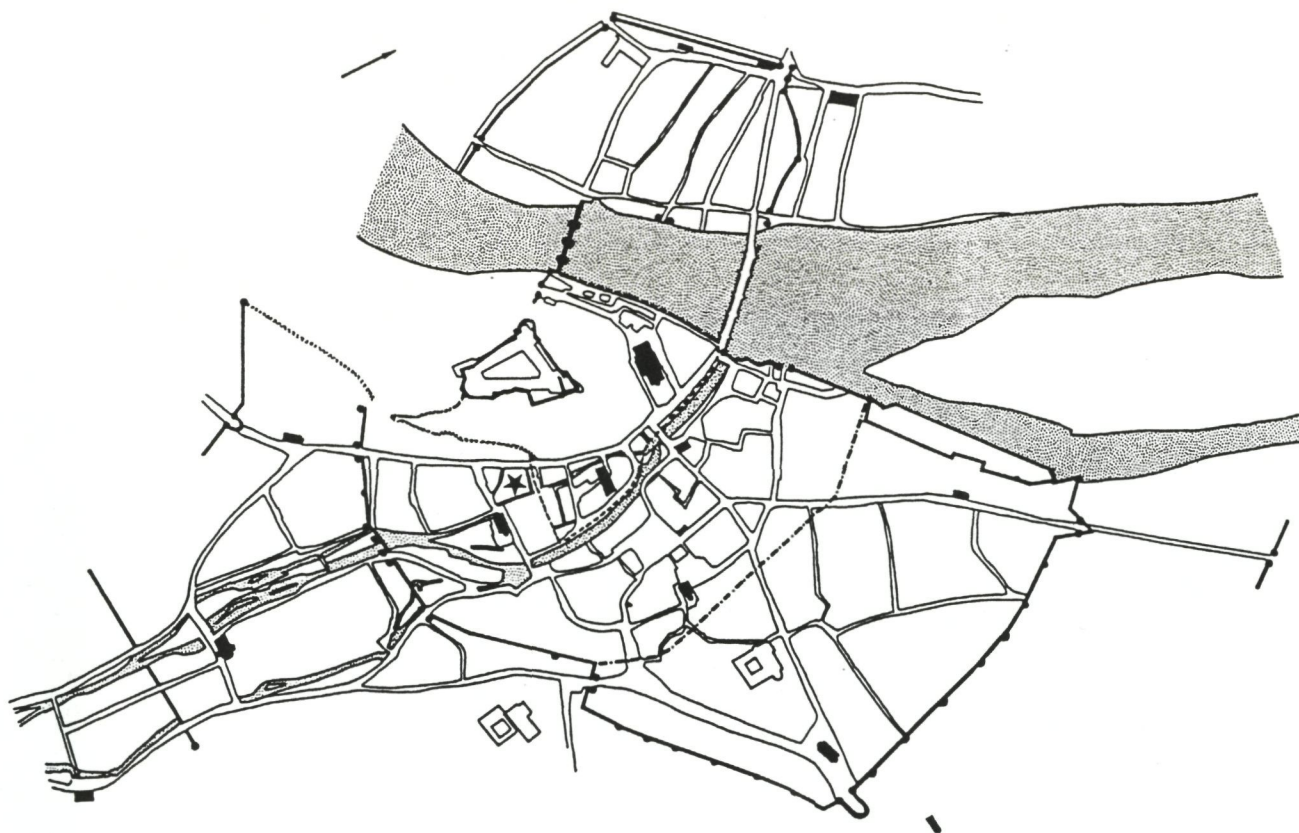


Fig. 2. - Position du site sur un plan de Huy au XIV^e siècle, d'après une reconstitution d'André Joris.

pierres et de fragments de tuiles installée au sein d'une couche très humifère, organique, contenant une grande quantité de restes fauniques. De ce niveau proviennent des céramiques dérivées des sigillées romaines et d'autres communes, grossières, un peu de petit matériel de bois de cervidé et d'os, quelques objets de métal, mal conservés et plusieurs fragments de meules en pierre. Associés à cette couche, une série de petits fours domestiques, piriformes, sont construits dans une cuvette remplie d'argile apportée (fig. 3, 3).

A l'époque mérovingienne, à partir du VI^e siècle, l'installation s'étend sur le fond de rivière asséché, où, à proximité d'un aménagement de pierres alignées en bordure est de la fouille (fig. 3, 4), de fonction hypothétique (aménagement de berge ou construction liée à l'habitat?) se mêlent des rejets domestiques (restes fauniques, céramiques) et artisanaux (déchets informes, fragments de vaisselle et filaments de verre, fragments de briques et de grès brûlés et vitrifiés, scories ferrugineuses) (fig. 3, 5). Plus au nord, une autre rangée de pierres est doublée d'une base de palissade faite de branches posées horizontalement et de piquets verticaux fichés de part et d'autre en alternance (fig. 3, 6). Cette structure est liée à des rejets charbonneux et des branches éparpillées, résidus de sa destruction. D'autres structures

alignées, parfois liées à des trous de pieux, mais toujours trop fragmentaires pour permettre la reconstitution en plan d'un habitat, d'un atelier ou d'un enclos ont été fouillées. L'abondance des restes animaux et le caractère humique des couches traversées font penser que l'élevage était très présent dans cette zone périphérique de l'agglomération.

A ce niveau mérovingien correspond un groupe de céramique fine, soit rouge, issue de l'évolution des formes sigillées romaines, mais avec des décors propres à leur époque, soit noire, lissée, décorée à la roulette, représentée par des vases bicôniques de même type que les urnes funéraires. S'y associe un groupe de céramique commune, surtout composé de pots à cuire en pâte grossière, toujours façonnés au tour, globulaires, à lèvre déversée, parfois creusée pour recevoir un couvercle.

Plusieurs fosses traversent ou sont issues des niveaux mérovingiens. Certaines sont de simples dépotoirs, d'autres, aménagées, cuvelées de branches que l'humidité du terrain a préservés avaient une fonction différente, sans doute celle de conserver, de façon saisonnière, certaines denrées végétales dont la nature pourra être précisée par l'analyse des macrorestes.

L'époque mérovingienne est une période de grande vitalité ecclésiastique et de croissance indéniable dont l'indice majeur est l'atelier monétaire de pre-

mier plan mis en fonction à Huy au début du VII^e siècle. La dispersion des monnaies hutoises donne une idée de l'étendue du marché commercial de l'époque, cette vitalité s'accroît au VIII^e siècle grâce aux échanges maritimes. Le site de la rue Sous-le-Château, sans doute fort marécageux à l'époque, reflète mal cette richesse, mais une vue globale des découvertes de même époque (cimetière de Saint-Victor, Batta, place Saint-Séverin, avenue des Arden-

nes, place Saint-Jacques, et, tout récemment, rue Saint-Remy) permet à l'archéologie de confirmer l'analyse de l'historien.

Pour l'époque carolingienne, une installation un peu plus structurée mais toujours rudimentaire se précise. Deux cabanes rectangulaires sont délimitées par des rangées de pierres (fig. 4, 1), leur sol est constitué de terre ou d'argile rapportée, tassée, la base de

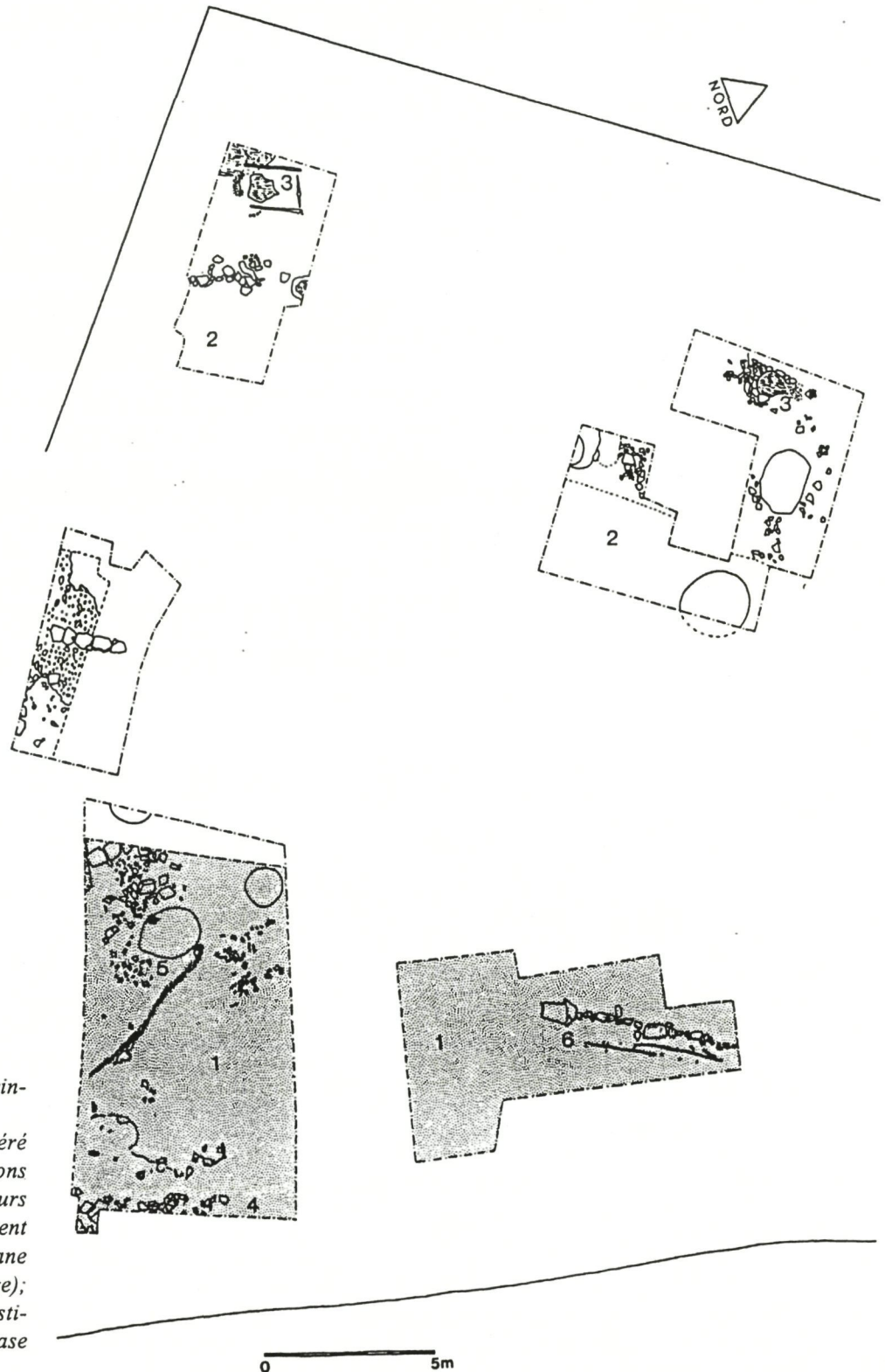


Fig. 3. - Niveaux mérovingiens.

1. Cailloutis aggloméré (fond de rivière); 2. Limons en place; 3. Bases de fours domestiques; 4. Alignement de pierres (paroi de cabane ou aménagement de berge); 5. Zone de rejets domestiques et artisanaux; 6. Base de palissade.

petits foyers s'y incruste. En périphérie, le fond d'un four circulaire (fig. 4, 2), des zones empierrées contenant des céramiques et quelques déchets de travail du bois de cervidé, une fosse-silo (fig. 4, 3) aménagée avec de la paille et contenant une grande quantité de pépins de mûres, des zones humiques avec de nombreux ossements animaux et des rejets de foyers, suggèrent une dépendance d'habitat ou un abri semi-rural. Plusieurs fosses et alignements de pierres dégagés

dans d'autres sondages, trop restreints pour permettre la lecture d'un plan témoignent d'une certaine densité de l'occupation. Déjà apparaît une succession de remaniements superposés, dans des dépôts noirs, plastiques dont l'aspect et la composition démontrent que les bras du Hoyoux ne sont pas encore canalisés de façon efficace et que la vallée subit des inondations endémiques.

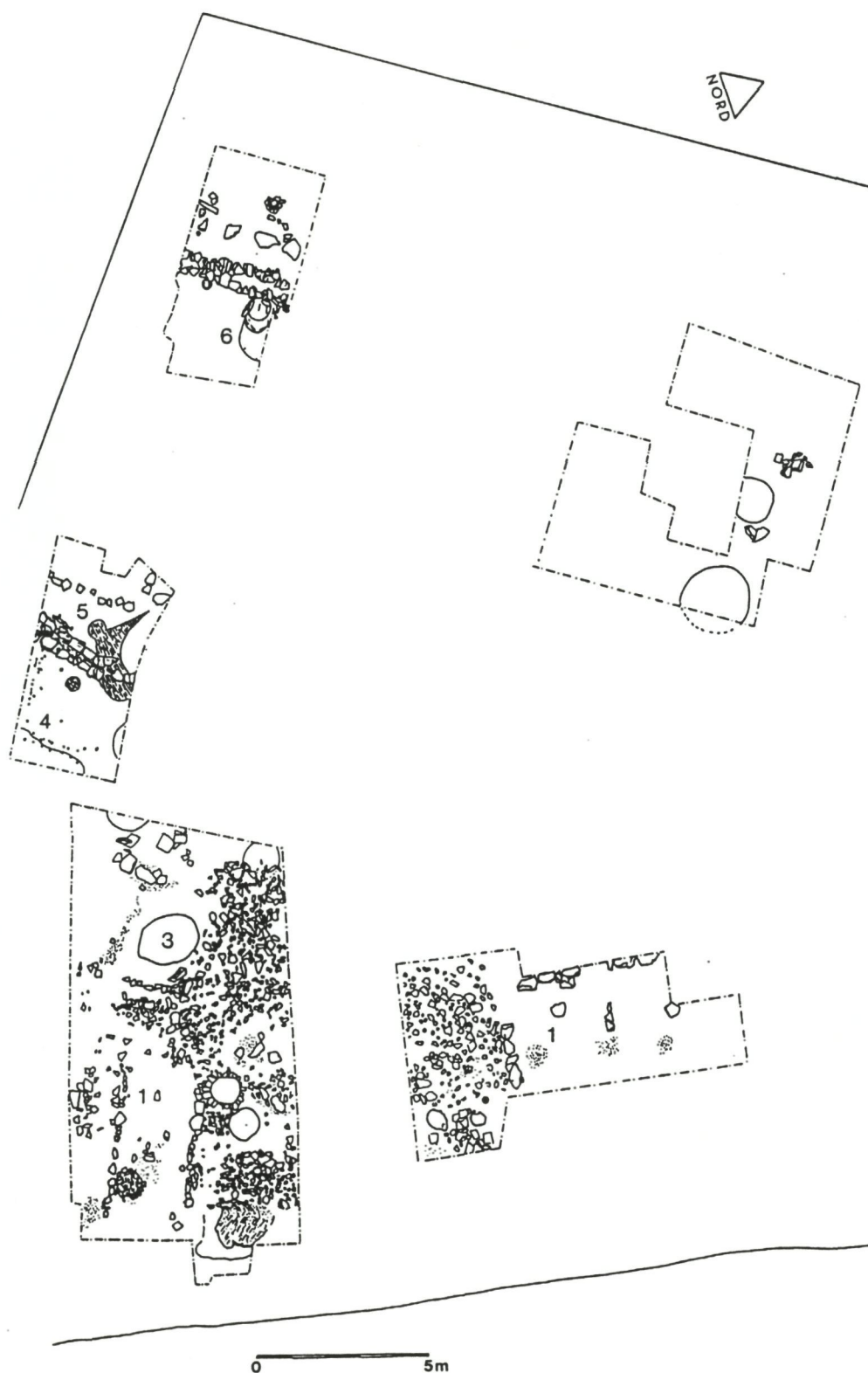


Fig. 4. - Niveaux carolingien et post-carolingien.

1. Cabanes rectangulaires avec foyers;
2. Base de four;
3. Fosse-silo;
4. Sol formé par un dépôt d'argile et bordé de traces de piquets alignés;
5. Alignements de pierres, bases de cloisons ou de murs;
6. Fosse-silo (?) présentant plusieurs cuvelages de baguettes liés à des utilisations successives.

Les dépôts carolingien et post-carolingien contiennent une céramique répartie en deux phases. La plus ancienne est représentée par une abondante céramique commune, soit des pots à cuire globulaires à fond plat, à cuisson réductrice, aux lèvres déversées, arrondies, sans gorges pour couvercles, portant parfois un décor à la roulette sur la partie supérieure de la panse, soit des écuelles à panse carénée. La céramique fine de cette période est de type mosan ou andennais, à pâte blanche, lèvre déversée avec légère gorge, parfois un goulot tubulaire, une ou plusieurs anses plates, courtes. Quelques céramiques noires grossièrement lissées, à décor ondulé dérivent des productions mérovingiennes. Enfin, illustrant le caractère international du commerce à cette époque, plusieurs types de céramiques rhénanes sont représentés, dont une grande partie reste à déterminer par une étude détaillée. La phase récente se caractérise par l'apparition des décors sur la céramique de type andennais (pâtes claires, fines), les vases ovoïdes ont les fonds plats ou lenticulaires, les lèvres déversées présentent une gorge et parfois un replat vertical extérieur (bandeau court), les décors sont des rubans appliqués et repoussés ou pincés, des empreintes de roulettes (rares), une glaçure plombifère parfois épaisse, parfois partielle ou éclaboussée, de la peinture rouge appliquée au doigt (lignes ondulées, vagues irrégulières, points, taches informes, cercles...). Ils sont parfois associés. Il est important de noter la grande quantité de céramique surcuite, gréseuse ou de type protogrès. La pâte et les parois sont fines, ces vases globulaires ou ovoïdes à fond lenticulaire sont tous des pots à cuire, le seul et rare décor est la peinture. Une étude plus poussée déterminera s'il s'agit de céramiques importées ou d'une production mosane.

La ville se structure au cours des XI^e et XII^e siècles, autour d'un noyau castral établi au pied du rocher sur lequel se dresse la fortification occupée lors de conflits, et du domaine ecclésiastique entourant l'église Notre-Dame. Commerçants et artisans s'installent petit à petit à proximité du *portus* (*apleit*), autour d'un marché. Tout comme le travail et le commerce des peaux et des fourrures, la métallurgie du bronze et du laiton assurent principalement la richesse de Huy en ce début du Moyen Âge. L'agglomération s'étend peu à peu, se développe sur les deux rives.

De cette époque datent les premières constructions maçonnées, de petites habitations rectangulaires (fig. 5, 1) au plan simple avec sol en terre battue, souvent de l'argile apportée, et foyer soigneusement construit, rectangulaire ou circulaire, en argile bourrée de tessons et cernée de pierres dressées.

Une d'entre elles comporte deux petits fours piriformes, probablement domestiques (fig. 5, 2). Durant tout le Moyen Âge, suite à un vieillissement naturel ou à une dégradation plus brutale, ces constructions seront remaniées ou rebâties, toujours en surhaussant le sol de l'édifice. Les murs se superposent, sont abandonnés ou partiellement conservés et liés à de nouvelles structures, tant et si bien qu'il est souvent impossible de les situer dans le temps autrement que par la chronologie relative. A ces habitations sont liées des constructions profondes, puits, citernes, puisards et basses-fosses (fig. 5, 3) utilisés longtemps ou réutilisés à des fins diverses, contenant un matériel abondant rejeté lors de leur abandon. Il s'agit en majorité de céramiques de type andennais telles que décrites dans la classification de René Borremans². Les céramiques importées devront être déterminées par l'étude poussée des pâtes, des cuissons et des formes.

Au XIII^e siècle, la prospérité des bourgeois de la ville est le fruit de l'apogée de la draperie. Outre la grande enceinte, de nombreuses constructions entrent en chantier, aboutissant peu à peu au cours du XIV^e siècle à un meilleur aménagement urbain dans une ville très compacte. Sur le terrain fouillé, certaines ruelles déjà pavées au XII^e siècle sont abandonnées et remplacées, le réseau se systématise, reliant cours intérieures et venelles entourant les habitations. Les citernes ou basses-fosses sont comblées et les parcelles construites sont plus grandes. L'habitat soigné témoigne d'une certaine richesse, comme le soubassement en pierre, le foyer avec cheminée et le sol pavé de carreaux de terre cuite colorés et glaçurés d'une maison à colombages (fig. 5, 4). Une cave de très grandes dimensions (fig. 5, 5), réaménagée à plusieurs reprises, utilise en partie les murs d'une cave plus ancienne et met en œuvre des matériaux romans et gothiques dont un très beau linteau à crossettes. Les deux piliers monolithes de section carrée destinés à soutenir la poutre maîtresse d'un plafond plat étaient restés debout, maintenus par les sols effondrés des étages supérieurs: mélange du limon argileux des chapes et d'une multitude de pavés de terre cuite. La dimension du bâtiment (90m² au moins pour la cave fouillée qui communique avec plusieurs autres caves non dégagées) incline à penser qu'il avait une fonction publique, peut-être s'agit-il de la halle aux Draps située dans le quartier Saint-Remy par André Joris.

² BORREMANS R. & WARGINIAIRE R., *La céramique d'Andenne. Recherches de 1956-1965*, Rotterdam, 1966.

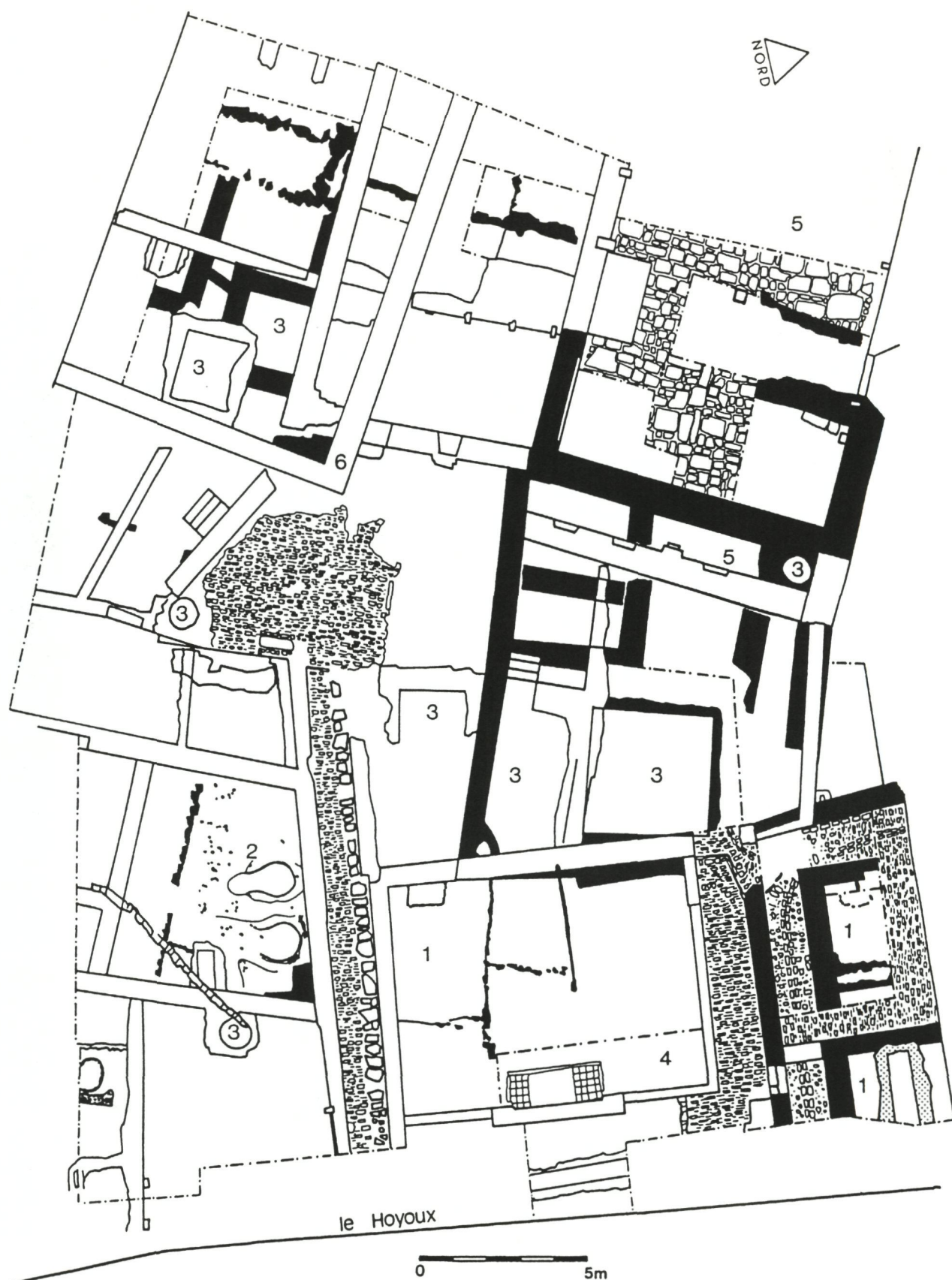


Fig. 5. - Niveaux médiévaux: tramé noir: XI^e-XII^e siècles, tramé ligné: XIII^e-XV^e siècles.

1. Habitations avec foyers et sol de terre battue. Bases de cloisons légères; 2. Bâtiment comprenant deux foyers domestiques piriformes; 3. Puits, citernes, puisards ou latrines; 4. Soubassement maçonné de maison à colombages réaménagée à plusieurs reprises et utilisant certains murs de bâtiments antérieurs; 5. Cave dallée réutilisant partiellement les murs d'une cave plus ancienne; 6. Fondations d'un édifice du XVI^e siècle.

Au XV^e siècle, la permanence des troubles socio-politiques et plusieurs mises à sac de la ville provoquent un déclin économique et un net recul démographique. La superficie habitée se contracte, on ne voit plus se construire d'édifices publics jusqu'à la Renaissance mosane au XVI^e siècle. De fait, la plupart des bâtiments occupant le site disparaissent au cours du XV^e siècle, ne subsistent plus, jusqu'au XVII^e siècle, que l'édifice comprenant la grande cave et une construction tardive (seconde moitié du XVI^e siècle) (fig. 5,6), tous deux orientés vers l'ouest, vers la rue Sous-le-Château, une des artères principales de la ville. Le reste du terrain est livré à la culture.

Au XVII^e siècle, l'ensemble du quartier subit un bombardement à partir du fort, occupé par les troupes de Louis XIV, cet assaut laisse des traces: impacts et fragments de bombes de fonte. Aucune reconstruction ne suit, épargnant les vestiges médiévaux enfouis dans un terrain demeuré jardin jusqu'à nos jours.

La recherche sur terrain est terminée, première étape d'une étude globale. Reste à établir une chronologie la plus précise possible grâce à l'étude du matériel archéologique prélevé, surtout de la céramique, très abondante, et à la mise en relation de ce matériel avec les structures dégagées. Dans une perspective plus large, la réunion des études de plusieurs sites fouillés dernièrement dans ce quartier, et l'étude d'une ancienne tannerie voisine, commencée cette année, constituent le début d'une approche archéologique systématique du centre ancien de Huy. Ce travail avait débuté en 1962 par les travaux de sauvetage réalisés par plusieurs associations d'archéologues amateurs, le "Cercle archéologique Hespéromanie", puis "Archéologie Hutoise" qui avaient déjà mis en évidence l'importance de Huy au Haut Moyen Age. Nous comptons bien continuer la démarche et nos recherches dans toutes les zones menacées qui nous seront accessibles.

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Recovering Destroyed Topography: archaeology, town planning and social context in late Saxon Norwich

The city of Norwich lies in eastern England, some 35km from the North Sea within a rich agricultural area. It was one of the great English provincial cities in the middle ages, retaining national importance as the ‘Second City’ of the kingdom until as late as 1730. It is still the regional capital with a population of nearly 150,000, major local industries and a retail sector currently ranked as 18th in the United Kingdom.

This continued importance is relevant as modern commercial pressure for change can have a heavy impact upon the historic environment. Such pressures are not, of course, unique to Norwich and, across the country, archaeologists have worked closely with local and national authorities over the last quarter century in an attempt to mitigate the effects of development activity and to ensure that the inherited urban topography is understood and considered when planning decisions are made.

The study of urban topography has therefore had a practical, beneficial outcome in cities such as Norwich where, increasingly, the importance of early street systems and land divisions is becoming recognised in a manner similar to that now generally afforded to historic buildings. The particular *academic* problem for urban archaeologists in Norwich, however, has been the complexity of topography to be studied, resulting in part from an extended period of urban development between the early 10th and mid-12th centuries but also from distortions introduced into the plan of the borough at an early date. These distortions were the result of massive redevelopment of the urban core in the 11th century and again, on a smaller scale, in the 13th century. They inflicted great damage on the early built environment, not only destroying structures but also suppressing much of the bare skeleton of the settlement’s street plan. Inevitably, the survival of an incomplete urban plan has led to a loss of understanding concerning urban origins and development.

The Bruges Conference paper will explore the lost topography of the city, examining evidence at both a *macro*-level (natural features and streets) and a *mi-*

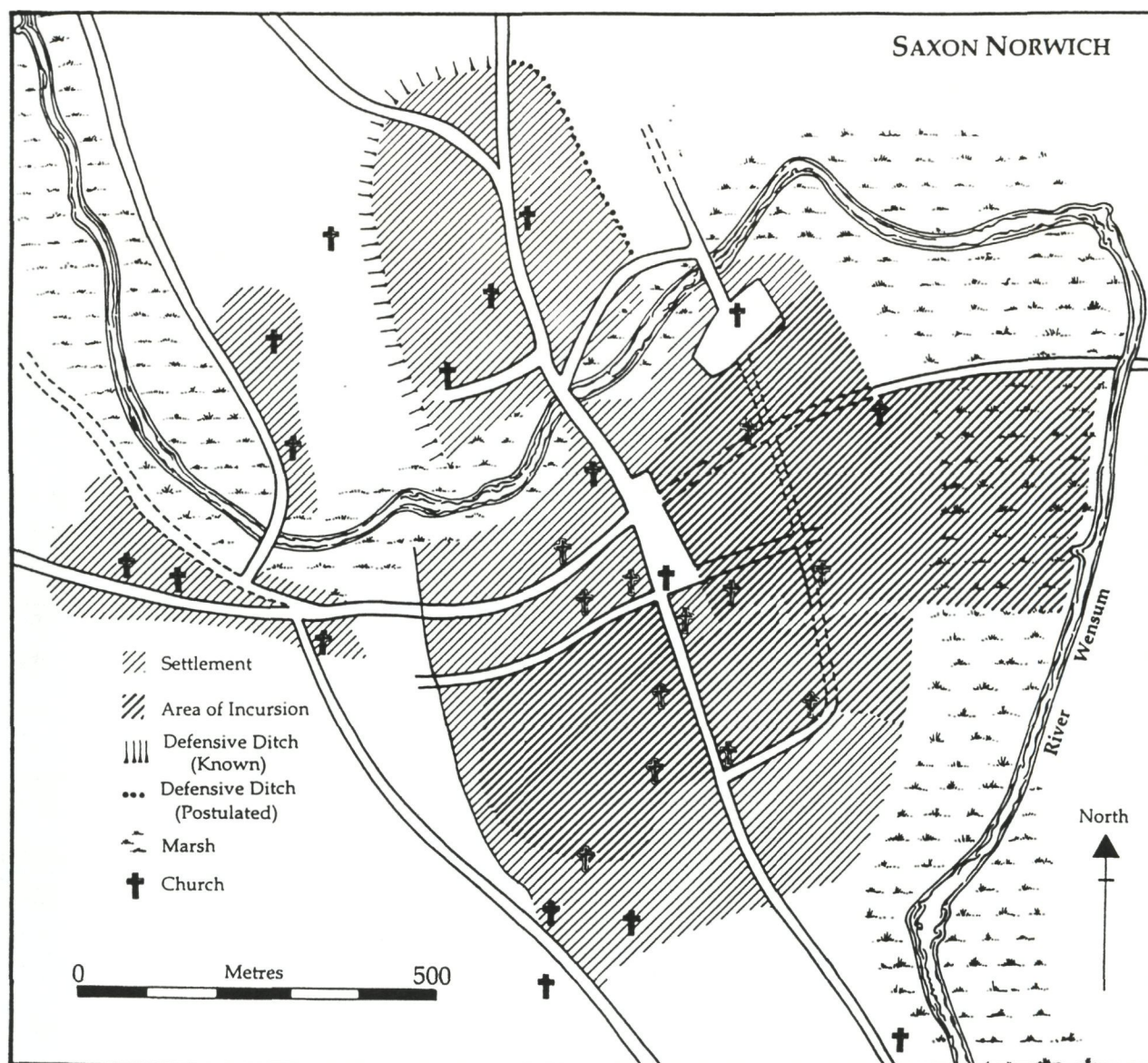
cro-level (tenement plots) in order to restore a skeleton upon which the flesh of archaeological and historical discoveries can be hung and within which determinants for the development of the city can be postulated.

Urban Origins

The city of Norwich lies in the valley of the River Wensum, immediately upstream of its confluence with the River Yare. The site of the historic core was one crossed by tributary streams to the Wensum which entered the river from both the north and south banks. Relatively steep hills exist close to the river on the south side with level ground north of the river separating it from similarly steep hills to the north-east.

Norwich was not a Roman foundation but seems to have come into existence in the later 8th century. Its early development remains obscure but the latest research indicates that settlement was largely concentrated along both banks of the river where the valley was narrow and gravel terraces provided well-drained sites (Ayers 1994 and Ayers in prep). There is little evidence to suggest commercial activity at this period although occasional finds, such as the odd sceatta from Mercia or a sherd of Frankish pottery, imply that some trade beyond the immediate hinter-





Plan of Saxon Norwich showing the approximate areas of settlement, the sites of probable pre-Conquest churches and areas of Norman and later incursion (the area of the Cathedral precinct extended across the marsh although it remained open land). The bold line defining the western edge of the main settlement represents the Great Cockey, a tributary stream of the River Wensum. Postulated road alignments are shown by dashed lines.

Drawn by Piers Wallace © Norfolk Archaeological Unit.

land may have taken place. There is a complete lack of documentary evidence for the period with place-name survivals tending to be geographically specific (such as *Mereholt* meaning 'boundary wood'). Such place-names, nevertheless, help to suggest limits to early urban organisation.

There is considerable tangential evidence to imply that the arrival of the Danes in the later 9th century was a formative influence upon urban growth. Again, documentary evidence does not exist at all but place-names, settlement and defences morphology, artefacts and church dedications all indicate the impact of Danish culture upon the local environment (Ayers 1994, 25 ff). It is particularly noteworthy that Danish

place-names are generally topographically specific, many street-names containing Scandinavian elements (such as Cowgate where Old English *cu* is combined with Old Norse *gata* – Sandred and Lindström 1989).

It is likely that Norwich developed considerably after the reconquest of eastern England from the Danes by Edward the Elder in 917. Coins of Edward's successor, Athelstan, were minted in Norwich in the 930s, suggesting a centre of regional importance. By the 980s Norwich was considered of equal status to Cambridge, Ipswich and Thetford in a document known as the *Liber Eliensis*. The growing settlement was attacked by Swein of Denmark in 1004 who 'completely sacked the borough and burnt

it down' (Garmonsway 1953, 135). Development thereafter, however, must have been rapid as, by the time of the Norman Conquest in 1066, there were 1320 burgesses in Norwich (Brown 1984) and between 25 and 40 churches, implying a population of between 5000 and 10000 people.

Historical and Archaeological Study

Research, particularly since 1972, has demonstrated that much of the area enclosed by walls in the latter 13th and 14th centuries was occupied by 1066. The Late Saxon borough was more than a political and social antecedent to the medieval city; it provided much of the topographical layout of that city too. Cartographic, documentary and archaeological study has enabled a greater understanding of urban growth before the Conquest (Campbell 1975; Carter 1978), although many of the details either remain to be established or are debatable. Such work has demonstrated how many surviving topographical features, such as the parallel alignments of St George's Street and Calvert Street, reflect early urban concerns (in this case those of defence, the streets marking the line of a 10th-century bank and ditch – Atkin *et al.* 1985; Bown forthcoming).

Much of the definition of areas of Saxon occupation has been undertaken through careful analysis of archaeological material. This has involved not only modern excavations and observations but also analysis of chance finds recorded over the last century by Norwich Castle Museum (Carter 1978; Jennings 1981). Where possible, the opportunity has also been taken to reassess early interpretations, as at Wensum Street in 1974 where excavation demonstrated that an oak piled causeway across the river and its marsh was probably of Late Saxon construction, rather than being Roman as originally thought (Roberts *et al.* 1975, 101; Hudson 1898, 217-232).

The principal result of recent research has been to define the broad extent of urban settlement by the mid-11th century. There was clearly an early, and probably primary, focus on the north bank of the river, quite probably stimulated by Anglo-Scandinavian expansion. Sporadic occupation at least took place contemporaneously on the south bank until rapid expansion, probably in the early 11th century, ensured that the area of the south bank was that most densely-occupied in 1066. Industrial activity took place across the settlement although there was probably a major concentration of pottery manufacture west of the main south bank focus. Suburban development to the west of this seems also to have started by the second quarter of the 11th century.



Franciscan Friary Excavations 1993: line of pre-Friary street cut by construction of the precinct wall about 1250 (remains of the wall in the background).

Scales: 2m and 1M. © Norfolk Archaeological Unit.

Details of occupation within this broadly-defined Late Saxon settlement of Norwich continue to emerge. Many of these can be fitted into a topographical framework which was clearly in existence by the Conquest and remains largely unchanged: streets such as Magdalen Street, Colegate, Fishergate, Calvert Street, St George's Street and (until destroyed by development in 1974) Botolph Street on the north bank are all the result of Late Saxon development. Similarly, on the south bank, Tombland, Elm Hill, Waggon and Horses Lane, Princes Street, Queen Street and Bank Street must have existed by 1066. However, recent excavations at Castle Mall (1989-91) and Greyfriars (1993-95) have demonstrated that Saxon occupation was considerably more extensive to the south and west, complementing probable Saxon occupation within the area of the Cathedral Close to the east (Shepherd forthcoming; Emery forthcoming; Ayers 1996). Each of these areas, however, is now largely devoid of streets which can be shown to be of Late Saxon origin.



*Church of St. Martin-at-Palace: the east wall showing quoins of Barnack limestone at the corners of the chancel set in long-and-short work. Mid 11th century (the window is later).
© Norfolk Archaeological Unit.*

Loss of Early Topography

The Norman Conquest had a profound effect upon Norwich. An impression of the social impact is afforded by the Domesday Survey of 1086 within which it is stated that the number of burgesses had dropped from 1320 in 1066 to a mere 650 at the time of the Survey and that 'those fleeing and the others remaining have been utterly devastated partly because of Earl R(alph)'s forfeitures, partly because of fires, partly because of the King's tax, partly by Waleran' (Brown 1984, 117b) – Waleran had the farm of the King's tax and was notoriously rapacious. The physical impact was even more profound and certainly longer lasting.

A major royal castle was under construction soon after the Conquest (Brown *et al.* 1963, 753-54), on land which both Domesday and archaeological work suggest was originally occupied by part of the Late Saxon borough. It stood astride the Ber Street escarpment south of the river, with a steep slope eastward towards the north-to-south alignment of the river and a further slope westward to a tributary stream, the

Great Cockey. Eventually it covered some 14 acres (5.5 hectares).

West of the castle, across the Great Cockey, the fields of the borough were sequestered for the foundation of a new borough for the '*Franci de Norwic*', that is a borough specifically for Norman-French burgesses. This was in existence by 1075 when its co-founder Earl Ralph was discredited. To the north-east, a new cathedral church together with an attendant Benedictine monastery was established from 1096. This probably entailed the destruction of many houses as well as the enclosure within the cathedral precinct of numerous parish churches (Ayers 1996). Subsequently, after 1226, the development of the Franciscan Friary immediately to the south of the Benedictine monastery led to further destruction of pre-existing urban property.

The cumulative effect of the establishment of these major institutions was to disrupt the heart of a thriving Late Saxon community. Although development of adjacent areas eventually compensated for the losses of urban buildings, the comprehensive redevelopment of sites initiated by the foundation of

institutions such as the Cathedral and the castle meant the destruction of earlier topography. Unlike similar modern redevelopment, an archaeological record was not made in advance of the destruction; it needs to be recovered now in order to understand the socio-economic dynamics of the Late Saxon borough as a whole.

Recovering Lost Topography

The Bruges Conference paper will therefore explore three areas of lost urban topography, those of the Cathedral Close, the area of the castle and the precinct of the Franciscan Friary. It will illustrate how a combination of investigative techniques, utilising geographical features, documentary and cartographic evidence, archaeological data and relict topographical survivals can enable the reconstruction of much of the pre-existing street pattern. Further, it will demonstrate how the reconstructed topography implies deliberate plantation of much of the south bank area in the century before the Conquest, probably in the first quarter of the 11th century and quite possibly as a joint initiative by local magnates.

The paper will conclude with some preliminary observations on a fourth area of the city, that around St Benedict's Street. Here the street plan topography has not been lost but work in progress suggests that it may be possible to argue that the still extant topography of individual tenements could be the result of deliberate planning of a suburb before 1038.

In summary, therefore, it will be argued that careful analysis of a range of evidence in Norwich can not only recover destroyed topography but can also suggest directed intervention at an early period in both the overall and the detailed planning process. Study of the urban landscape of Norwich enables conclusions to be drawn concerning social organisation at an early period as well as increasing understanding of the development of the built environment.

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From beach to burh: new clues to entity and identity in 7th- to 9th-century London

Summary

Recent excavations within the trading settlement of Lundenwic, and at Queenhithe, the earliest Saxon site on the waterfront within the former Roman city have yielded a wealth of information on Saxon London, and the integrated study of the finds from these and other sites is throwing new light on the events of the 9th to early 10th centuries. The local, national and international forces which governed change and exchange during the Saxon period will be considered along with other evidence and differences in finds assemblages of the two centres. Research is still in progress and the lecture aims to expand or update the different themes noted below, as well as integrate further relevant data from contemporary sites in north-west Europe.

Introduction

Over the last decades there has been much speculation regarding the location and nature of Middle Saxon London. Extensive excavations during the 1970s and early 1980s within the City of London had failed to find any stratified traces of occupation dating to between the Roman period and the late 9th century, prompting various independent enquiries as to why this should be so (Blackmore 1983; Biddle 1984; Vince 1984; Tatton-Brown 1986). The conclusion, based on the distribution of chance finds, was that the Middle Saxon occupation lay in the area of the Aldwych, or Old Wic, the main axis of activity being along the line of the Strand. It was not until 1985 that the first excavation took place at Jubilee Hall. Originally intended as a watching brief, permission was given for one week of excavation when human remains were unexpectedly found on the site (Cowie *et al.* 1988). Since then middle Saxon deposits have been observed by MOLAS on some forty sites in the Covent Garden area (Cowie 1988), culminating in the Royal Opera House site, which was excavated in 1995-96. At 2500 sq metres, this is

likely to be the largest sample ever to become available for investigation.

Much work has been carried out on sites within the City which have been dated to the later 10th century onwards (Vince *et al.* 1991), but until the excavations of 1990-95 by MOLAS at Queenhithe (Ayre *et al.* 1996) there was little evidence for the transition from the Middle Saxon commercial base to that of the Late Saxon period (Clarke & Ambrosiani 1995, 13-14). The purpose of this paper is to fill this gap by presenting recent evidence for changes taking place, especially during the 9th century, which paved the way for the new urbanism from which London as we now know it developed.

Origins

London lies within the county of Middlesex. This may have once formed part of a larger area occupied by the Middle Saxons, which was probably encroached on by Essex, Wessex and possibly also Kent (Dyson & Schofield 1984, 290-291). By the early 7th century Middlesex was part of the kingdom of the East Saxons; however, this had probably formed under the protection of the kings of Kent, and Aethelberht of Kent was 'over-king' of the East Saxons (and in fact most of England) when Pope Gregory determined that bishoprics should be established in London and York (Stenton 1985, 109). The church of St Pauls was accordingly founded in 604 by Aethelberht for Mellitus, the appointed bishop of London, who was to preach to the East Saxons (Bede, trans. Sherley-Price 1990, 90-91; 107-108; Vince 1990, 54). A bishopric was also established at Rochester, Kent in the same year. In 616, Essex reverted to paganism, and would appear that Christianity only regained its hold in the 660s (Bede, trans. Sherley-Price 1990, 113-114; Vince 1990, 61). While there is a problem as to whether the original church of St Pauls was destroyed or remained standing, this does not mean that there was no activity within the former Roman city, or no growth. Despite its eccentric position,

London is clearly described by Bede as the capital (metropolis) of the province of the East Saxons (although from the 670s it was under the control of Mercia), and as a mart of many nations coming to it by land and sea. How did this come about - was the *emporium* to the west of the city a consequence of the location of the church, or vice versa?

The configuration of London in the first quarter of the 7th century can at present only be understood in broad terms. The church of St Pauls presumably had adjacent quarters for the bishop and clergy, but it is unclear to what extent the remainder of the city might have been occupied. The city walls enclosed c.133 hectares, but the present finds distribution, albeit very limited, suggests that the Saxon activity rarely strayed to the east of the Walbrook, and that it was concentrated in the area around and to the south of the church of St Pauls, sited near Ludgate, where the Roman road led out of the city, along the Strand towards Westminster. Other religious sites may include the churches of St Martin, St Gregory and St Augustine, located at intervals along the line of Watling Street (Tatton-Brown 1986, 22-23), although their foundation seems more likely to date to after 660 than before it. Additionally, there has long been speculation regarding the location of an administrative base within the former Cripplegate fort, where in the second half of the 8th century Offa reputedly had a palace; this is thought to be site of an 'old' royal palace referred to in the 11th-century (Vince 1990, 54-55), but as yet there is no evidence for any pre-Alfredian activity in this area.

In Britain, however (unlike Gaul), former Roman towns were generally shunned by the Saxons, who favoured open sites and wooden buildings for their domestic settlements. The general population would not have settled within the city, but outside it, and here the most favourable location was the Covent Garden area, where good beaching facilities are juxtaposed with dry land on the terrace above the river. There is virtually no evidence for Saxon occupation to the east or south of the city.

To some, the choice of a site within the Roman city walls for the new church of St Pauls has implied the existence of a well-established trading settlement in London by 604. In national and international terms this seems too early. Nonetheless, the spot selected by Aethelberht for St Pauls is significant. The choice of eminent sites must have been considerable, but that chosen is on the highest ground closest to the trading settlement to the west, from which it would have been visible. Furthermore, there is some evidence for an early 7th-century religious focus in the Covent Garden area in the form of inhumation burials with grave goods from the site of St Martins in the Fields

(discovered in the early 18th century) and a 13th-century reference to 'treasure' found at the church of St Martins (Harden 1956, 142; Vince 1990, 60-61; Blackmore 1993, 136 and note 14. A second, possibly later, area of burials is now known from the Drury Lane area (see below). No cremations have been found in any area.

If there was no settlement already in place here by 604, then one must have evolved in tandem with the increasing activity in the city, the latter evidenced by the fact that London had the first English mint and that its coins were circulating widely by the 640s, if not earlier (Vince 1991, 415). Increasing international contact (and possibly some commerce) by the second quarter of the 7th century (Hobley 1988, 70) would presumably have been further boosted by the revival of the church in 660. Among the few finds of this period in the Museum of London collections are three complete Merovingian pots (Blackmore 1993); these have no archaeological association, but if genuine (rather than antiquarian acquisitions) may indicate burials. These possibly reached the city via *Quentovic*, the point from which travellers to and from England crossed the channel and where an early mint was also established. It is likely that this early London mint was housed within the city walls. It has been suggested (eg. Tatton-Brown 1986, 25) that the wic of London may have been 'founded' by Aethelberht of Kent (d.616); this cannot be proven, but the development, both in spatial and economic terms, of the commercial and industrial zone which by the 680s was known as *Lundenwic*, was in all probability determined by royal power, whether based within the city walls or in Kent.

This paper will concentrate firstly on the 'Strand settlement', and then on some initial events in the London of Alfred and Aethelberht.

Lundenwic

Topography of the trading settlement

The main feature of the extra-mural vicus was the Strand, a former Roman road which ran alongside the Thames. Slightly further inland, on the gravel terrace, isolated burials took place in the second half of the 7th century; whether they can be taken as evidence for a postulated reeve's garrison is debatable (Vince 1991, 414-415). At Long Acre a male burial wearing a belt set of Frankish-Alamannic type similar to the Bern-Soluthurn group and dated to 640-670, must have been a foreign visitor of some status. The only British parallel for this belt is from a grave in Ipswich. Loose finds from the Drury Lane area in-

clude early vessel glass and a later 7th-century gilded bead similar to those on a necklace from Desborough, Northants (Webster & Backhouse 1991, 28-29); a complete pot has been found here, and another at the Savoy, south of the Strand (Blackmore 1983, 84; 1988, 85, 88). Fragmented human remains were also found in the earliest levels at the Royal Opera House. At Jubilee Hall a burial has been C14 dated to the period 630-675 (68% confidence level), or 565-770 (95%). The body was prone, and the deceased had been wounded; it is likely that this was a felon or unwelcome alien (Cowie *et al.* 1988). A male burial with a spear on the nearby site of Chandos Place is problematic, appearing to lie within a Middle Saxon occupation sequence (Whytehead *et al.* 1989).

The chronology of the trading zone Lundenwic is currently being refined by a combination of pottery, stratigraphic analysis, coin dates and other techniques such as dendrochronology, C14 and archaeomagnetism. During the first and second quarters of the 7th century occupation may have been seasonal, but the site was clearly taking shape as a commercial entity between c.650-670. The first documentary reference to a port is in a charter of 672-74, when Frithuwald of Surrey (a sub-king of Wulfhere, king of Mercia) gave to abbot Eorcenwald and the monastery of Chertsey lands which included 'ten hides (*manentes*) by the port of London, where ships come to land on the same river on the southern side by the public way' (Gelling 1979, 148, no. 309; Whitelock 1979, 479; Dyson 1980). This implies that Chertsey abbey (founded together with Barking Abbey c.666) may have held a strip of land between the Strand and the Thames. In 675 Eorcenwald became bishop of London.

Growth and control of trade is recorded by the laws of the kings Hlothere and Eadric of Kent (673-85 and 684-686 respectively) which refer to a hall where purchases (translations vary between property, cattle and 'anything') were to be validated by witnesses and the king's reeve (*wic-gerefa*, translated as either town reeve or port reeve) to witness' (Hardman & Stebbing 1941, 45; Whitelock 1979, 395). Such a hall could have been located in the City, but the discovery at York Buildings (near Charing Cross) of a timber revetment dated by dendrochronology to 670-690 lends weight to it being near the Strand. This is the oldest such structure in the country (Milne 1989; Cowie 1992). There may, therefore, have been a series of similar revetments, if not one continuous one, along the foreshore in front of which boats could have been beached on the foreshore. Some trade may have been carried out on the beach, or on board ship. Another apparently early site in Kemble Street, at the eastern end, and to the north of the Strand, has

produced the earliest coin so far found in the area, a primary sceatta dated to 690-725.

Most initial settlement probably straggled along the Strand. By the late 7th century occupation was spreading up onto the terrace and over the land formerly used for burials, at least as far north as Long Acre. The western boundary was along the line of Charing Cross Road. The eastern fringe is the most difficult to define, but may have originally lain in the area of the Aldwych rather than by the river Fleet. Sites to the north and west of this provisional area, and to the east of the Aldwych all appear to be of 8th- or 9th-century date. At its maximum extent *Lundenwic* probably covered some 60 hectares.

Until the excavation of the Royal Opera House, it was hard to make sense of the fragmented buildings and gravel surfaces found on smaller sites. Now, however, we have the framework into which finds from smaller sites in the surrounding area can be slotted. The main feature was a north-south road leading down to the Thames; this was initially flanked by drainage gullies, later by timber-lined drains. The road was laid out in the later 7th century, and at an early date in the site sequence; the fact that rubbish had accumulated alongside it indicates that there was some time lapse before the first buildings were erected. These seem to have occupied relatively fixed plots divided by alleys; the main alleys were of similar width to the road but less well maintained; subsidiary alleys and eaves drips were also noted. In all, seven plots of fairly uniform size were identified, on which there were nine timber buildings with wattle and daub walls, most aligned east-west with the long side parallel to the alleys. On one plot there seems to have been a courtyard arrangement.

Several buildings were destroyed by fire, and their alignments changed slightly as they were rebuilt, but not significantly. No organic timber survived, but large spreads of carbonised timber were exposed, in one case a timber plank over 3.5 metres long. The total number of structures recorded amounts to approximately twenty; most were probably multi-functional. Associated with the buildings were hearths, well and numerous pits; a complex of enigmatic industrial features was also discovered. Some degree of individual responsibility is evidenced by the variety of building techniques recorded, but the fact that the road was carefully maintained, being resurfaced more than ten times, indicates communal effort, possibly in response to external dictates. In this context it is of interest that some extremely large gravel quarries, probably dating to the mid-8th century, have been found on the western fringe of the settlement by the National Gallery (Whytehead *et al.* 1989).

Trade and industry

In national terms, the function of most wics was to supply the court, the church, or both, with goods and revenue from tolls, which at Quentovic and Dorestad has been estimated at 10% of the value (Lebecq 1997, 76). *Lundenwic* had a strategic location at the border of several different kingdoms; it had connections with several religious foundations across the country and was part of an international trading network which included *Hamwic*, Kent, Ipswich and York in England, *Quentovic* in France, Dorestad, Ribe, Haithabu (*Sliastwig*) and Birka on the continent. These interacted within different, but overlapping spheres, the emphasis changing through time.

Documentary sources show that trading regulations established by the kings of Kent continued in force under Mercian rule, when royal officials held functions similar to those of the Kentish reeve. The close relationship between *wic* and church, demonstrated by the grant of Frithuwald (see above), continued in the 8th century. Between 716 and 745 Aethelbald of Mercia granted the bishop of London toll and custom due from one ship (Sawyer 1968, no. 1788), while at some point between 757 and 796 the land on which the emporium lay was allegedly granted by Offa to a foundation at Westminster (Gelling 1979, 111; Vince 1990, 66-67), which was presumably to benefit from the revenue levied by tolls. This was confirmed in a charter of 959 whereby the Abbey of Westminster was granted a large block of land between the rivers Fleet and Tyburn (Gelling 1979, 111, no. 225; Vince 1990, 62; 66-67; Fig. 14). Between 757 and 796 Offa also extended the liberties of the monastery called *Paulesbiri* (Gelling 1979, 98), normally assumed to be St Pauls. Contacts between *Lundenwic* and Kent also continued in the 8th century. There are references in 733, 734 and 747/748 to the nuns of Minster in Thanet and the bishop of Rochester, who were exempted from paying tolls due by public law on one ship in the port of London (Sawyer 1968, nos. 86, 88; Gelling 1979, 96, 97; Whitelock 1979, 491); references to Minster appear to cease c.760. In 743-5 a similar concession was granted to the bishop of Worcester (Sawyer 1968, no.98). The latter is the only known charter to refer to the port as *Lundentunes hyde*, but this is because it is written in Old English, not Latin.

The initial continental contacts were with Quentovic and the Merovingian world, but the passing reference made by Bede to the sale in 679 of a prisoner to a Frisian merchant (Bede, trans Sherley-Price 1990, 242) shows that Frisian traders were already taking an interest in London. From the 8th century all trade around the north sea was dominated

by the Frisian trading network which was centred on the Low Countries and their hinterland, which from c.700 was extending into the Rhineland. As Middlesex was taken by Mercia, the role *Lundenwic* grew. From 716 trade flourished under king Aethelbald and subsequently Offa. Continuing commerce with the Franks in the 8th century is shown firstly by Charlemagne's closure of foreign ports to English merchants following a dispute with Offa in 789, and the resolution of this difference resulted in the first recorded commercial treaty for England (Stenton 1985, 220-221). In 790 Offa is reputed to have granted privileges for land in *Lundenuuic* to the abbey of St Denis which were confirmed in a charter of 857; the authenticity of both is dubious (Sawyer 1968, no.133, 318; Gelling 101, 105), but there is evidence for Anglo-Saxon merchants attending the annual fair at St.Denis from c.700 (Lebecq 1997, 76).

Study of the pottery from Lundenwic is confirming and amplifying this picture, and it is through the ceramic analysis, in conjunction with independent dating, that the broad chronology of the *wic* is being determined (Blackmore 1988; 1989; 1993). The sequence falls into three or four broad bands. The first comprises chaff-tempered wares and a range of non-local and imported types. This would appear to last for up to 100 years, chaff-tempered ware declining from c.750. The second phase is characterised by the presence of Ipswich type wares, production of which is now thought to date from c.730. It is uncertain how rapidly these wares were exported to other sites in England, but it is clear that once the trend began the Ipswich potters were extremely successful in their enterprise. Suddenly every household in *Lundenwic* had to have at least one of these heavy duty wares, which by 750 were certainly dominating the market. Between c.650 and c.800 the imports are dominated by grey and blackwares from Northern France or Flanders, with a few buff wares from Normandy and the Seine Valley and occasional sherds of 'Tating' ware. The third phase is characterised by shell-tempered wares and Badorf-type wares, which appear only slightly later in the stratigraphic sequence, perhaps by 775.

It is hoped that the scientific analysis of the different pottery types will help provenance the sources more closely, both for the regional and continental types. There is some slight evidence in the clustering of non-local wares for enclaves of traders from other areas of England, but the various continental imports are scattered across the entire settlement, suggesting that if these were brought in by merchants for their own use, then they were well-integrated with other folk.

Distribution analyses of the other finds shows that there are trends in the organisation of the settlement,

although it is not yet possible to say how dense the occupation was across the whole area at any one time, or which zones were functioning concurrently. Boneworking is an early industry, present right from the start, but perhaps dying out in the second half of the 8th century. Antler offcuts are present on most sites, but there are concentrations in the eastern part of the settlement (although it must be admitted that there is an excavation bias in this area). Iron smithing started in the late 7th century, and continued into the 9th; it would appear to be mainly confined to peripheral sites. Alloy-working was carried out on a small scale at the ROP and doubtless on other sites. Weaving, by contrast, although present on a small scale in the 7th century, does not seem to have been carried out on a large scale until Ipswich wares were in use, that is, from c.730. If, as suspected, the production of Ipswich ware is associated with a Frisian initiative, then it is likely that the distribution of the ware was also affected by Frisian trading activities, which may in turn have stimulated the growth of cloth production in London. Analysis of the vast collection of over 500 loomweights from the Royal Opera House assemblage will have a bearing on this dating, but by c.750 textile production was a major industry in *Lundenwic*, and this corroborates the late 8th-century correspondence between Offa and Charlemagne which refers to the trade in [quern] stones and English cloth, the quality of which was found wanting (Stenton 1985, 220-221).

The Royal Opera House finds also include a few artefacts which would be more at home in Scandinavia or on a late Saxon/Viking period site within the City (see below). These include decorated bone gaming pieces, a bone handle for an awl, a rune pin and some lead weights. The date and significance of these finds remains to be determined.

Lundenwic to Lundenburh

The economic fortunes of *Lundenwic* are the subject of ongoing research; a period of rapid growth in the late 7th and 8th centuries was apparently followed in the 9th century by a decline experienced by many centres participating in international exchange at this time. The fact that the latest known sites all lie at what is thought to be the fringe of the *wic*, suggests that the maximum extent was reached between c.750 and 770, and this is the likely date of the Whitehall site and the growth of activity in the Westminster area.

The second quarter of the 9th century brought uncertainties, both internal (conflicts between Wessex and Mercia) and external (the increasing threat of Viking attack. In 839 (more probably in 841-842) the

Anglo-Saxon Chronicle records a great slaughter at London and in Rochester. Raids are documented in 842 and in 851, when some 350 ships arrived at the mouth of the Thames and London and Canterbury were both stormed.

Former writers have tended to assume that in the mid 9th century *Lundenwic* was a densely populated trading centre cut short in its prime, and that a wholesale removal of the population was organised by Alfred (Dyson 1990; Vince 1991, 6, 418-419), but it may be that the settlement was already undergoing some shrinkage and change in emphasis before the Viking attacks. For the most part, finds diagnostic of the mid-9th century are hard to pinpoint within *Lundenwic*, and it may be significant that the last recorded use of the term 'wic' for London is in a (spurious) charter of 857 confirming a land grant to St. Denis (Sawyer 1968, no. 208; Hobley 1988, 71). Whether there was a shift in the focus of the *wic* prior to c.840, or whether, precautions were then taken to move the population before the actual raids, or whether there was a gradual scattering of the inhabitants of *Lundenwic* is debateable; the evidence is ambiguous and recent finds from the Royal Opera House will be of considerable importance in this regard.

The most significant discovery is a large east-west defensive ditch which ran along the northern side of the excavated area of the Royal Opera House site, on a different alignment to the buildings. This feature is currently dated to the 9th century, as is a similar feature found slightly further south on another site. A series of multiple stakeholes along the southern face of the Opera House ditch suggests that it was fortified with a series of wooden spikes, although no trace was found of them. The ditch appeared to have filled (whether deliberately or naturally is not yet known), and been sealed by a layer of dark earth in which was buried a hoard of 21 Northumbrian stycas, the latest of Osbert (848-67). Two further stycas have been found in Leicester Square, others from Queenhithe (see below) which have a die link with those from the Opera House. It must, therefore, be envisaged that this part of the *wic* had been abandoned for several years before the coins were buried, which must be after 848 and could be c.870. However, other finds from the Opera House include one late 9th-/early 10th-century archaeomagnetic date from a hearth within a building, which suggests that part of the site may have been occupied in the late 9th or early 10th century (see also above; Dyson 1990, 108). Possible explanations for this will be further considered in the lecture.

Two 9th-century documentary references, by contrast, give a rather different picture of London.

In 839, the newly consecrated Bishop Helmstan of Winchester, wrote of an 'illustrious place, built by the skill of the ancient Romans, called throughout the world the great city of London' (Stenton 1985, 56). The second, of 857 concerns a grant made by Burgred of Mercia to Alhwine/Ealhhun, 'my bishop' of Worcester, of 'a certain small portion of a liberty, of a profitable little estate in the town of London, at a place called *Ceolmundingchaga* which is situated not far from the west gate' (Ceolmund was a prefect or reeve, possibly the same man as was granted land near Rochester in 842). The bishop of Worcester was to have 'all the things which rightly belong to it (ie the property), great and small, ... to have therein to use freely the scale and weights and measures as is customary in the port.' The rent was 12 pence per year (Sawyer 1968, no. 208; Whitelock 1979, 529).

The location of the site is uncertain and the use of both the terms town and port are confusing, but the west gate is a fixed point which narrows the possibilities, while the port indicates a site near the river. A site near Newgate has been proposed (Dyson 1978, 206-207), but other possibilities, both inside and outside the city should not be ruled out. The wic seems too far away, but a location in the area of the Temple, just across the Fleet from Ludgate, could fit the criteria. This area appears to have been of a higher status than the wic; other finds include the famous sword pommel from Fetter Lane (to the north of Fleet Street), dated to the late 8th century (Webster & Backhouse 1991, 211), and the hoard of 250 coins from Hare Court, in the Temple, conventionally dated to c.842. A fine Trewhiddle-style strap with niello decoration, recently found on a site within the Temple and dated to the third quarter of the 9th century, would be in keeping with the residence of a bishop. The other most likely spot for this site is within the walls, between Baynards Castle and Queenhithe, where the bishop of Worcester was to acquire property in the late 9th century.

Lundenburh

As already noted, the hub of Middle Saxon activity within the city appears, from a very limited ceramic distribution, to have been in the western part of the city. However, although the Roman quays and medieval sequences are well documented, deposits which can be securely dated from the before 11th century are limited. Queenhithe, once known as *Aethelredes hythe*, has long been accepted as the oldest part of the late Saxon waterfront, but it has always been assumed that it was an Alfredian creation. Recent excavations suggest that its use may be

older still, and there may have been some commercial activity in the town in the mid-9th century,

In 866 the Great Army led by the Norwegian brothers Ivarr and Halfdan arrived in England, and in 871 this was joined at Reading by a second troop, the 'great summer army', the origin of which is only recorded as 'overseas' (Williams 1996, 92). In 872 this combined force moved to London. The raids of c.842 and 851 may have attacked *Lundenwic*, the city, or both; that of 872, however, is more likely to have focussed on the city. The Mercian king Burgred made peace with the Vikings by paying a heavy tribute; as a fundraising initiative the bishop of Worcester had to lease (or sell) an estate in Warwickshire to one of the kings thegns (Stenton 1985, 250-251). However, as a result of a deal at Repton (in Mercia), Burgred was deposed in 874 and a Viking sympathiser, Ceolwulf, took his place. Mercia was divided between Ceolwulf and Guthrum, then the leader of the southern Viking force, and the latter then attempted to gain Wessex, which since 871 had been under the rule of Alfred. In order to counter the threat posed by the Danes, Alfred instituted across the country a series of burhs (fortified towns). Some were in former Roman towns which were refortified, others were new strongholds, but all had a combined military and commercial function (Dyson 1990, 99) in order to both withstand attack and revive the economy.

The Vikings were quashed by Alfred at the battle of Chippenham in 878; this resulted in the submission of Guthrum and his concomitant conversion to Christianity, and a treaty between Alfred and Guthrum regarding the boundary between Wessex and the Danelaw. At the time of this treaty, Middlesex and London, as part of Mercia, was controlled by Guthrum (or through Ceolwulf), but lands to the east of the Lea were in fact part of Wessex, as they had been for most of the 9th century (Wilson 1996). Following the battle of Chippenham, Danish forces are recorded as over-wintering at Fulham, just upstream from London, in 879-80. By this point the Strand was probably abandoned by the people of the wic (but it is not impossible that it was used as a Viking base). In 880 Guthrum, then known as Athelstan, settled in East Anglia. The main thrust of the Fulham army was in France, but attacks were also made on Kent and the Wessex kingdom (mainly Essex and Kent). Between 872, if not earlier, and the city was under Viking control, perhaps in a relatively peaceful state until c.879. Increasing instability is however reflected in the Bucklersbury coin hoard, dated 880-899 (Vince 1991, 418), perhaps buried during an English attack on London in 883, or in 886.

In 886 Alfred is recorded as having not only

occupied London, thereby ousting the Danes, but as having 'splendidly restored' the city. The evidence for Alfredian London has reviewed by Dyson (1978; 1980; 1990); and is not detailed here. The first priorities were the installation of a garrison and the creation (or recreation) of a trading shore. In contrast to other Alfredian towns, there was little trace of the pre-planned street pattern which might have been expected from contemporary burhs. Nothing is known of the former, while until recently the commercial and domestic side was evidenced at only two sites: at Bow Lane and Well Court (Dyson 1990). This lack of evidence may be due to the fact that Alfred did not stay in London, but left it under the control of the Ealdorman Aethelred of Mercia, (later his son-in-law), who was 'to guard it after the ranks of the garrison had been strengthened' (Dyson 1990, 99: from the *Chronicle of Aethelweard*), although later disturbance of the area has been considerable.

Evidence for the location of an early commercial centre, however, has been slowly taking shape. A grant made by Alfred and Aethelred in 889 to the bishop of Worcester concerns a plot of land, for which remarkably precise boundaries were given (Dyson 1978, 205-206). This included 'a courtyard or enclosure described as an ancient stone building known to the citizens as *Hwaetmundes stan*'. This was to be used for market purposes, the dues being liable to the bishop, but it is clear from this document that commerce also took place 'in the public street' or on the 'trading shore' (*ripa emptoralis*) for it is stipulated that if any of the bishop's men participated in such external dealings they would be liable to royal dues. The word *stan* is a term often linked with the presence of former Roman buildings which were often used as quarries for stone (*ibid.* 209; Dyson & Schofield 1984, 289). The first word appears to be a personal name, although the only recorded example (Searle 1897). Comparison of the plot described with other evidence and the present topography of the area led to the suggestion that the building occupied part of the site of the Roman bath house on Huggin Hill, and that the *ripa emptoralis* referred to was that later known as *Aethelreds hythe* and finally Queenhithe (Dyson 1978, 209-11; 1990, 102-106). This grant was confirmed shortly before Alfred's death in 899, when an adjacent plot was granted to the Archbishop of Canterbury. As pointed out by Dyson (1978, 210-211), the allocation of land to these two men may be seen as a strategic move: both were to play a role, directly or indirectly in the administration of London and the promotion of its commercial enterprises. Given the previous references to the Worcester connection with London's trade it is, perhaps, hardly surprising that the initial grant was in favour of

Bishop Waerferth, who, in the late years of Alfred reign was instrumental in safeguarding the people, church and economy of Worcester (Stenton 1985, 528-529).

Until the 1990s, archaeology could not confirm the attribution of *Hwaetmundes stan* as the former bathhouse, where later terracing had removed any trace of a courtyard. The recent excavation to the south of the bathhouse at Queenhithe, however, has provided structural and artefactual evidence for the trading shore. The associated finds include a range of equal-armed brooches and disc brooches, and a copper alloy connecting plate for a comb which is virtually identical to examples from Haithabu, Birka and elsewhere in Scandinavia (Ambrosiani 1981, 68-70). A disc brooch with a cruciform motif, closely paralleled at Mainz, is arguably the latest find from this period (Wamers 1991, Abb. 64, no. 195). Also in this deposit were two Northumbrian stycas, with a possible die-link in the hoard buried at the Royal Opera House (E Pirie pers comm).

The data from the Bull Wharf excavation at Queenhithe is still being analysed, but it suggests that this point was chosen by Alfred for good reason. There was a pre-existing inlet and possibly a break in the city wall which, it seems, was already being used as a landing point, the Roman waterfront having been partially removed. A thick layer of silts had accumulated over the Roman structures and foreshore, in the uppermost part of which a number of metal objects had been dropped, some perhaps from trading on board ship (Milne 1989). While it has to be considered that these may have sunk from later levels, most items are suggestive of activity between c.850 and 886. The assemblage could not be more different from that typical of *Lundenwic*. No ceramics are present, but the range of well-preserved metalwork includes a Carolingian mount with foliate decoration, coin brooches, an equal-armed brooch with rounded terminals (cf Capelle 1976, Taf. 5, no. 53), a strap-end in the Trewhiddle style (much smaller and simpler than that from the Temple) and a number of hooked tags; the lead includes two 'cartwheel' amulets similar to a find from Domburg (Capelle 1976, Taf.36, no. 491) and two mounts, one paralleled at Domburg (Capelle 1976, Taf. 19, nos. 320-325), the other a Borre-style mount very like a find from Vesteras in Sweden (Capelle 1968, Taf. 23, no. 14). On the consolidated surface of the foreshore were two female burials, one in a grave cut (who had suffered a head wound), the other carefully laid out on bark and probably covered with a small barrow. The latter, associated with another cartwheel amulet, has been C14 dated to between 670-880. The barrow had disappeared, perhaps eroded by tidal action and replaced

by silts, but both bodies survived intact and cannot, therefore, have been visible when the Alfredian trading shore was created.

It was probably at the time of, or shortly after, the second grant, resolved in 898/899 in a conference at Chelsea (ref) that the first waterfront was installed at *Aethelreds hythe*, and this has been dated by two dendrochronological samples to 880++ and 890-923. Adjacent to this waterfront were erected a series of wattle buildings which appear to have had a domestic function; the 10th-century finds associated with these structures and incorporated in the next phase of re-vestment include household equipment and an excellent collection of leather shoes and scabbards (awaiting study).

The stratified finds from Queenhithe, together with a number of items redeposited in 10th- and 11th-century structures, suggest a lively trade from the mid-9th century with ports in the Frisian and Viking spheres. This is arguably the best collection of 9th-/10th-century Carolingian and Scandinavian metalwork in the country. Some finds have parallels in elsewhere in England, but few have been found in London before, and only in residual contexts. The archaeological sequence as a whole will also be crucial for the dating of the pottery and finds chronology for London. Current work is now suggesting that some sites may have been placed at up to 100 years too late, and that while pottery usage appears to have diminished dramatically in the late 9th and early 10th centuries, London did not necessarily have an aceramic phase.

Queenhithe, however, is of importance not just for its date and artefacts, but because it is from this point that the structure of London's medieval street pattern and waterfront (Milne 1989) was either fossilised or generated; further features of the site, which include a demolished aisle post-building dated to c.895+ (heartwood only) reused in a mid-10th-century waterfront, will add considerably to the evolving picture of Alfredian London. The charter of 898/899 shows that two parallel north-south streets which served as boundaries (Bread Street and Little Trinity Lane), existed by that date; Fish Street Hill may be of the same date (Dyson 1990, 106). Bread Street and Bow Lane both run north-south, linking the market street of Cheapside with Thames Street and the river (Dyson 1990, 106). The two excavated sites at Bow Lane and Queen Street may be part of the original Alfredian concept of a town plan or they may be slightly later (Vince 1989, 144, 153). As at York, it has been suggested that a second phase of development dating to c.900 may have occurred (Vince 1989, 153), and site at the junction of Queen Street and Cheapside in London has timber buildings which have recently

been dated by dendrochronology to c.921. Whatever the momentum, by the early- mid-10th century, a series of narrow north-south plots with narrow lanes was evolving in this area, the spaces enclosed gradually being filled by buildings; activity to the west and in the area of Billingsgate is slightly later (Dyson 1990, 107). This proto-burgage development is typical of late Saxon towns, but in this case it was clearly influenced by the street pattern emerging from 888 and recorded in 898/899.

The possibility of further excavation in this important area is uncertain, but a reconsideration of past findings might, in the light of a revised ceramic and artefactual sequence, illuminate the 'splendid restoration' carried out by Alfred and the role of this period in London's formation as a city.

Conclusion

To sum up, London in the 7th to mid-9th centuries was certainly bi-nodal, with a smaller royal and religious centre, and a larger industrial and commercial zone a short distance upstream, situated between Trafalgar Square and the Aldwych, with the possibility of a third area between the two, between the Aldwych and the river Fleet, in the later 8th and 9th centuries if not earlier. This belt of land, however, is an archaeologically unknown quantity. Further upstream there was probably some activity on Thorney Island from the later 8th century, if not earlier. The origins of London appear to contemporary with Ipswich (although different in character), and should also be coeval with York, although this remains to be demonstrated; on present evidence *Lundenwic* is significantly earlier than *Hamwic*. The economy and organisation of the wic was controlled by royal authority, but closely intertwined with, and possibly also dependent on, that of the church; from the mid-8th century the bishops of Worcester evidently played an understated role in the evolution of urban London. The events of the 9th century are still unclear, but it would now seem that:

- a) the settlement on the Strand may have been shrinking in by the 820s, with a shift downstream to the Temple or the city in the mid-9th century;
- b) There was perhaps a Danish presence in London from 874-886 (and possibly between c.840 and 874). The evidence from Queenhithe points to Frisian control of trade, which brought connections with the Rhineland and the Baltic.
- c) Alfred took London from the Danes in 886; rather than transplanting the Strand settlement, it may be that the dispersed Londoners regathered slowly within the city walls

- d) the Alfredian settlement, to the south of St Pauls was in an area which may have already been in use
- e) town planning may have been influenced by pathways and boundaries established in the pre-Alfredian period

This lecture could equally have been on the theme of Trade and Exchange, but it's money that makes the world go round, and through commerce, as much other factors, that urban centres rise and fall.

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Die Stadtentstehung Hamburgs, Deutschland

1 Historische Daten

Die Entstehung Hamburgs ist aus historischen Quellen und Überlieferungen einigermaßen sicher zu erschließen. Aus reichspolitischer Sicht läßt sich das Entstehen der fränkischen Hammaburg in den Zeitraum 817-822 einengen. Diese Befestigung und eine darin befindliche Pfarrkirche sind die Voraussetzung für die Begründung des Bistums durch Ansgar 831/2, der sogleich mit dem Bau einer Holzkirche und eines Klosters beginnt.¹

845 zerstören die Dänen Burg und *suburbium*, Ansgar kann entweichen und kommt 848 auf den Bischofssitz zu Bremen, wodurch beide Diözesen vereinigt werden. Die Erhebung zum Erzbistum erreicht er für Hamburg 864 unter Beibehaltung der Zusammenlegung.² Während Ansgar 858 mit dem Neubau des Domes beginnt, wird eine neue Befestigung, der Heidenwall, als Abschnittswall erst 936 angelegt. Eine bisher unerklärliche Situation, da man sich die Neubesiedlung ohne Schutz nicht recht vorstellen kann. Ein Slaveneinfall 983 führt erneut zu Zerstörungen. Um 1020 erbaut Erzbischof Unwan die Metropolitankirche neu, offensichtlich vergrößert, die aber nur von kurzer Dauer ist, da der 1035 bis 1043 amtierende Erzbischof Bezelin (Alabrand) zunächst in Bremen dann in Hamburg die Kirchen in Stein neu errichten läßt. Beide Grundrisse sind von deutlicher Gleichförmigkeit und Monumentalität. Sie entsprechen einem einheitlichen Baugedanken,³ der sich deutlich von dem gleichzeitigen in Verden⁴ unterscheidet (Abb. 1). Bezelin errichtet zur selben Zeit eine Burg aus Stein, nahe dem Dom gelegen.⁵

Ein neuerlicher Slaveneinfall 1066 zerstört die Kirche wohl nur in ihrer hölzernen Dachkonstruktion

und auch der Überfall 1072 kann die Entwicklung Hamburgs nicht dauerhaft behindern.

2 Archäologische Befunde auf dem Gelände der Hammaburg

Mit einem derartig präzisen Zeitgerüst ausgestattet, möchte man meinen, habe der Archäologe ein leichtes Spiel, zumal das Gelände der ehemaligen Hammaburg nach 1945 nicht mehr bebaut wurde. Dem ist aber nicht so. 1949 begannen hier Ausgrabungen, die mit einer größeren Unterbrechung endlich 1987 beendet wurden.⁶

Es zeigte sich, daß spätere Dombauten, zahlreiche Grablagen und besonders die Nachbebauung nach dem Abriß des Domes sowie kriegsbedingte Einwirkungen aus dem 2. Weltkrieg die Befundsituation sehr stark in Mitleidenschaft gezogen haben.

Im wesentlichen gesichert und gut dokumentiert ist aber ein archäologischer Befund, der sich in den historischen Quellen nicht widerspiegelt: eine Befestigungsanlage aus der Zeit vor der karolingischen Hammaburg. Es handelt sich um eine Doppelgrabenanlage (Abb. 2), die einen Innendurchmesser von nur 48 m aufweist, von dem noch ein – schwer nachweisbarer – Wall abzuziehen ist. Die schon von Schindler aufgefundenen spärlichen Besiedlungsspuren lassen kaum erkennen, welche Bedeutung diese Befestigung eingenommen hat. Die Datierung ergibt sich aus wenigen 14C-Daten, die von der Mitte des 7. Jh. bis in die erste Hälfte des 8. Jh. weisen.

Ob sich die später errichtete karolingische Hammaburg nahtlos an diese Vorgängeranlage anschließen läßt, bleibt vorerst offen.

¹ Die immer wieder herangezogene Pfarrkirche des Priesters Heridag, zwischen 810 und 814 errichtet, von der lediglich bekannt ist, daß sie im Norden jenseits der Elbe gelegen war, muß hier ausscheiden, da sie viel eher in Schenefeld lokalisiert werden kann.

² In den historischen Daten G. Theuerkauf in R. Busch (Hrsg.) 1995b.

³ V. Plagemann 1995, 29.

⁴ Nach zwei Holzbauphasen (vermutlich 849 und um 950) entsteht der älteste Steinbau (Phase IV) um 1000 durch Bischof Berhar II.; vgl. U. Boeck 1967.

⁵ Welche der Ausgräber mit dem steinernen Fundament eines Rundturmes verbindet; vgl. D. Bohnsack 1986.

⁶ Eine Teilveröffentlichung der Grabungsergebnisse vgl. R. Busch (Hrsg.) 1995b. Die älteren Mitteilungen hierüber sind damit teilweise überholt.

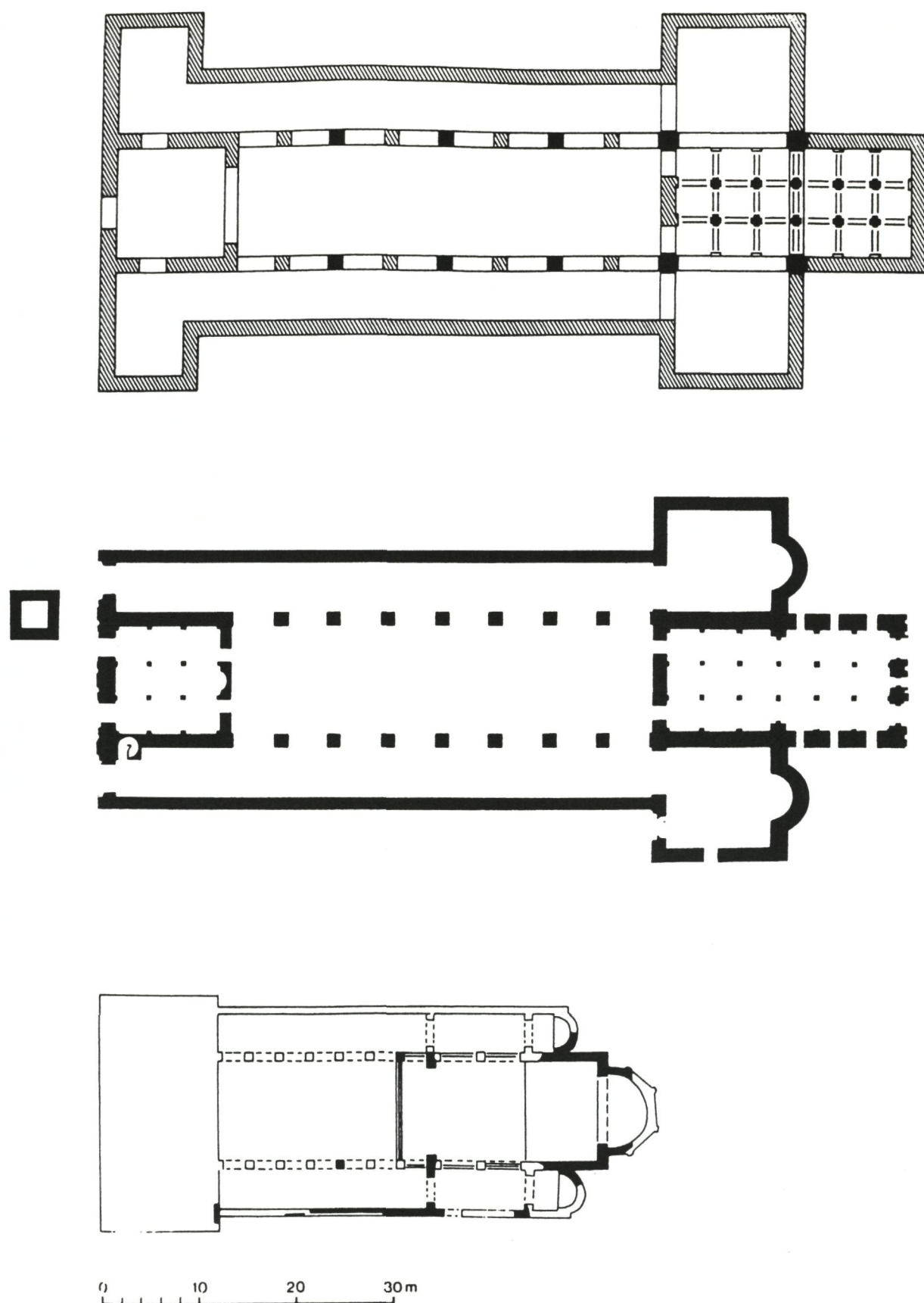


Abb. 1 - Die rekonstruierten Grundrisse der ältesten Steinkirchenbauten in Hamburg, Bremen und Verden (nach Plagemann 1995 und Boeck 1968), 11. Jahrhundert.

Die spärlichen Befunde von der Hammaburg selbst sind beschrieben, werden aber derzeit einer weit-

ergehenden Interpretation unterzogen, deren Ergebnisse abzuwarten sind.

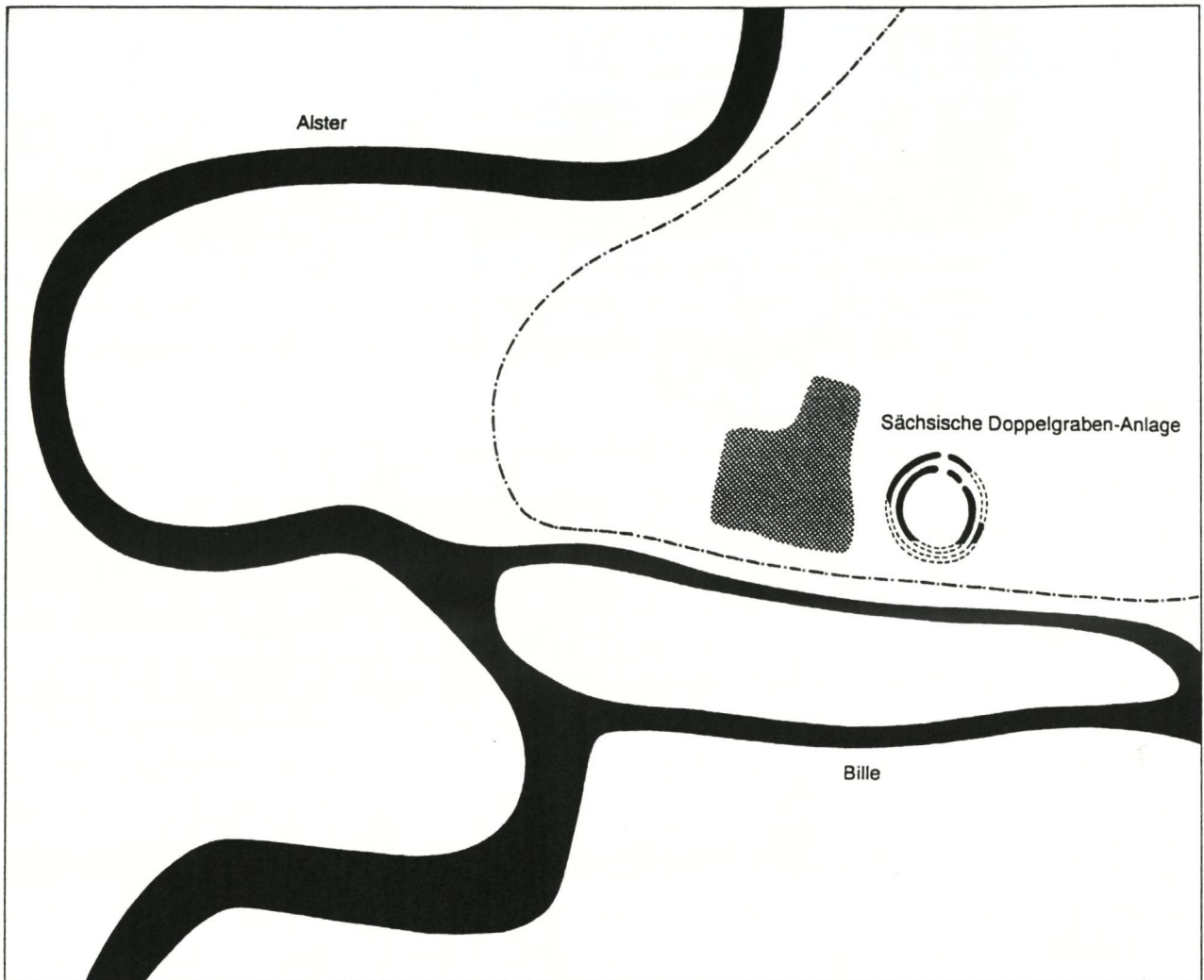


Abb. 2 - Die Doppelgrabenanlage aus sächsischer Zeit auf dem Gelände der späteren Hammaburg.

Die Befunde zu den älteren vier Kirchen vor dem gotischen Bau sind ebenfalls nur sehr lückenhaft erkennbar.

3 Nordische Metallfunde

Aus der Frühzeit Hamburgs interessieren aus chronologischen Gründen und wegen möglicher Fernbeziehungen Funde, die in den Norden weisen (Abb. 3). Die Anzahl an Metallfunden ist gering, doch beachtenswert. Wir müssen allerdings bis nach Stade blicken, um drei Schwerter des 5. Jh., Flußfunde aus der Elbe, zu erwähnen. Zwei VLFBERTHT-Schwerter des 11. Jh. stammen ebenfalls aus der Elbe, aber aus hamburgischem Gebiet, die allerdings nur bedingt als nordisch anzusprechen sind.⁷ Ein Wikingerschwert aus der 1. Hälfte des 9. Jh. wurde bei

Lünesand gefunden.⁸ Diese stehen nicht allein als Zeugnis für Handel, sondern können zumindest auch teilweise im Zusammenhang mit den Auseinandersetzungen mit den Dänen gesehen werden. Deutlicher weisen zwei Scheibenfibeln in die Wikinger-Kultur, die eher als Zeugnis von Handelsbeziehungen zu werten sind.⁹ Ihre Datierung in das späte 9. und 10. Jh. entspricht einem weiteren Fund, einer Nadel mit spatelförmigen Kopf,¹⁰ die auf dem Gelände der Hammaburg gefunden wurde, allerdings in einer Auffüllschicht, wodurch eine nähere Interpretation unmöglich ist.

Zusammengenommen zeigen die Funde, daß Hamburg im 10. Jh. mit dem nordischen Raum verbunden war, aber es müssen weitere Beobachtungen hinzutreten, bevor wir Schlüsse auf die Intensität dieser Beziehungen ziehen können.

⁷ Die Kartierung in Abb. 3 ist nur eine Annäherung an die Fundorte, da die meisten nur unpräzise überliefert sind.

⁸ R. Busch (Hrsg.) 1987.

⁹ E. Först in R. Busch (Hrsg.) 1995c.

¹⁰ Vgl. R. Busch, 1995d, Nr. 3.

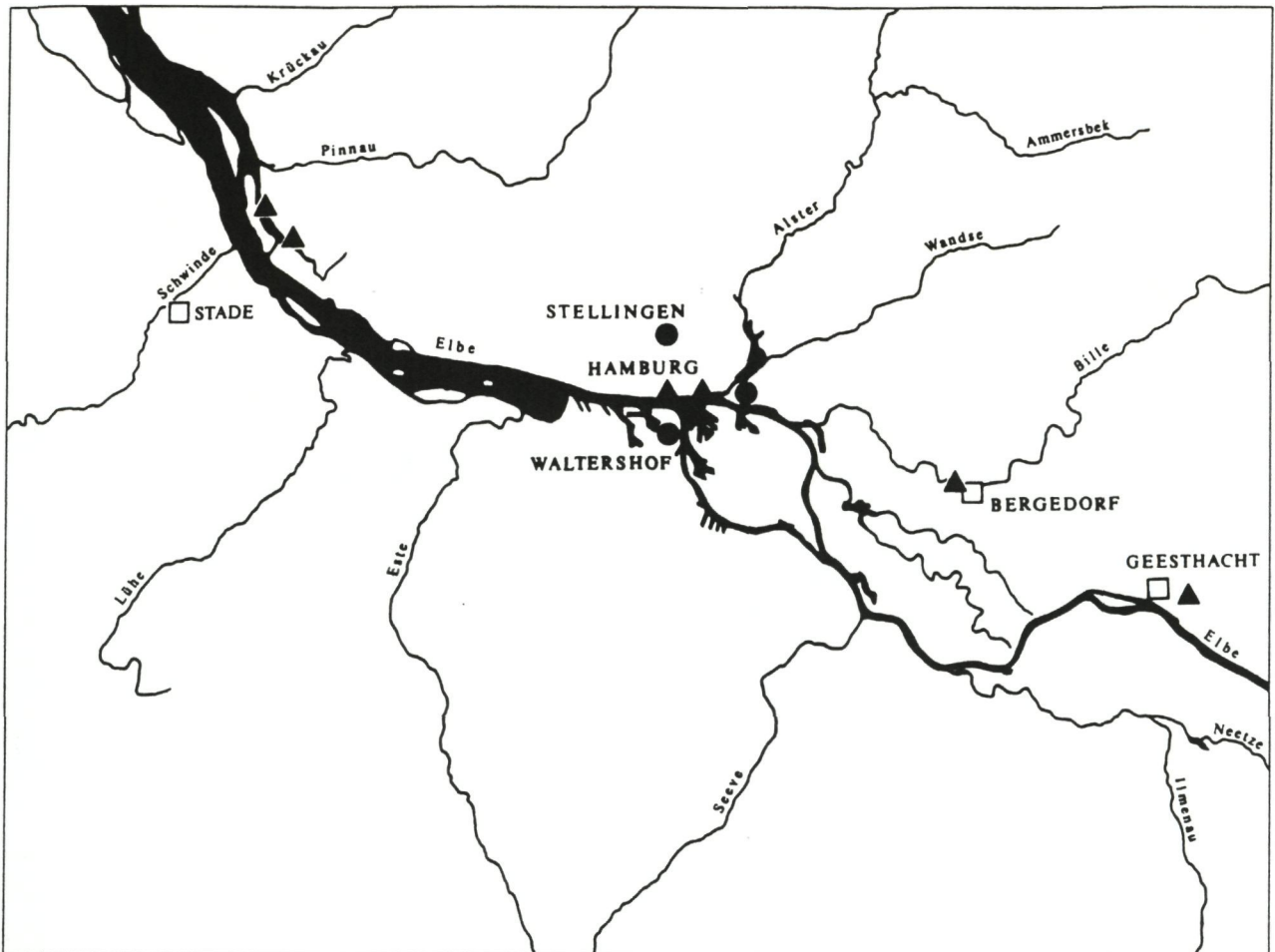
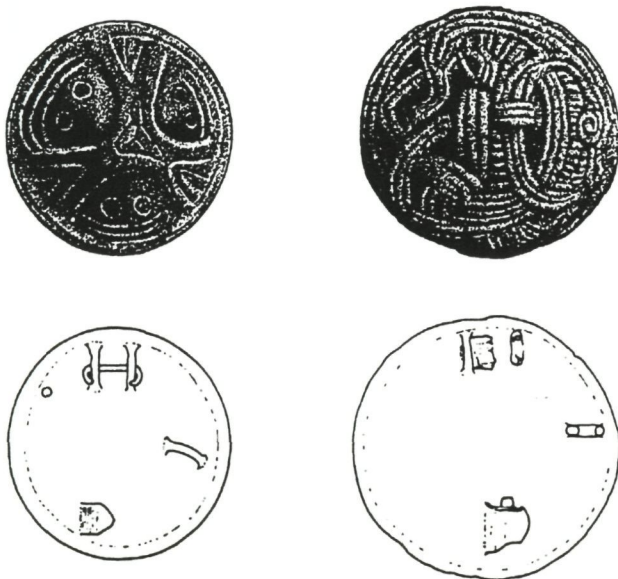


Abb. 3 - Verbreitung nordischer Metallfunde im Niederelbegebiet:

- Δ Schwerter 5.-11. Jahrhundert;
- \square Schmuck spätes 9.-10. Jahrhundert.

Abb. 4 - Skandinavische Scheibensfibeln im Borre- und Jellinge-Stil aus Hamburg-Waltershof und Hamburg-Stellingen, spätes 9. / 10. Jahrhundert. M 1: 1.



4 Ältere Altstadtgrabungen

Archäologische Beobachtungen in Hamburg reichen bis in das späte 15. Jahrhundert durch A. Krantz zurück, waren aber meist immer nur punktuell zustande gekommen, wenn Baubeobachtungen dieses auch zuließen. Erst R. Schindler als Leiter der Bodendenkmalpflege hat ab 1947 im Rahmen des Wiederaufbaus des kriegszerstörten Hamburg zahlreiche Baustellen systematisch untersucht und hauptsächlich das Gelände der ehemaligen Hammaburg (Domplatz-Grabung) zu untersuchen begonnen, was seine Nachfolgerin R. Schneider fortführte. Hamburg ist in jenen Jahren als beispielgebend für eine systematische Stadtarchäologie häufig gewürdigt worden. Man kann das übersichtlich an Hand einer Bibliographie zur Mittelalterarchäologie Hamburgs nachvollziehen (Busch (Hrsg.) 1989), so daß hier darauf nicht näher eingegangen wird. Auch an anderer Stelle ist ein zusammenfassender Überblick gegeben worden (Busch 1990; Busch 1995). Die älteren Grabungen sind durch ausführlichere Veröffentlichungen bzw. Kurzmitteilungen behandelt.

Bemerkenswert bleibt, daß man sehr früh bemüht war, nicht nur die Befunde, sondern auch eine Synthese aus dem Fundmaterial zu ziehen. So ist die



Abb. 5 - Nordische Nadel mit spatelförmigem Kopf aus Hamburg, Hammaburg-Grabung, spätes 9. / 10. Jahrhundert. M 1: 1.

Keramik des Mittelalters dank mehrerer Veröffentlichungen ausgewertet worden (Schindler 1952; Schindler 1959a; Schindler 1959b; Steffens 1958). In wie weit die dort erarbeitete Chronologie noch haltbar ist, wäre auf der verbreiteten Grundlage neuen Fundmaterials zu hinterfragen.

Die älteren Altstadtgrabungen haben Vorstellungen über den Siedlungsbeginn und seine Ausweitung erbracht; als Zentrum war die Hammaburg zu erkennen, ihr suburbium und die im 9. Jh. einsetzende Besiedlung der Reichenstraßeninsel im nördlich vorgelagerten Marschenland. Wegen der generell kleinen Grabungsflächen war die Entwicklung der Gebäude, die immer nur im geringen Partien erfaßt werden konnten, durch die Jahrhunderte hinweg nicht erkennbar. Offensichtlich hat man eher nach den Anfängen des Siedlungslandes gesucht. Dennoch ist eine bemerkenswerte Anzahl an archäologischen Beobachtungen in der Altstadt gelungen.

5 Neuere Ausgrabungen auf der Reichenstraßeninsel

Ab 1988 wurde es möglich, drei größere Baustellen auf der sog. Reichenstraßeninsel zu untersuchen (Abb. 6). Die Ausgrabungen waren durch das Baugeschehen vorgegeben. Dort handelte es sich um die größten nach dem Kriegsende unbebauten Gelände, deren Untersuchungen daher als besonders lohnend erschienen. Beispielhaft sei hier der Fundplatz 77 (Hamburg-Altstadt) vorgestellt.

Die Reichenstraßeninsel war einst von den Reichenstraßen- und Gröninger-Fleeten (Seitenarme der Bille) umflossen. Bei der Landnahme fand eine erste Besiedlung im 9. Jahrhundert auf der Höhe von ca. ± 0 NN statt. Wie frühere Ausgrabungen auf kleineren Flächen an mehreren Stellen verdeutlichen, handelte es sich dabei um kleine Flechtwandhäuser. Im 12. Jahrhundert entstanden Pfostenbauten mit Flechtwerkwänden, die größer dimensioniert waren und zu einer Verdichtung der Bebauung führten. Diese Ausgrabungen in den ersten Jahren nach Ende des 2. Weltkrieges zielten auf die Erstbesiedlung des Areals, wogegen die jüngeren Besiedlungsabläufe unbeobachtet blieben.

So blickten die Archäologen am Hamburger Museum für Archäologie und die Geschichte Harburgs erwartungsvoll auf das Projekt "Zürichhaus", das ihnen erstmals großflächige und parzellenübergrei-

fende Untersuchungen versprach. Dank des Entgegenkommens und mit finanzieller Unterstützung der Bauträger und des Architekten wurde die Möglichkeit zur archäologischen Untersuchung des Geländes an der Gr. Reichenstraße/Domstraße (Hamburg-Altstadt, Fundplatz 77) frühzeitig und bereits vor Baubeginn ermöglicht.

Auf einer Fläche von ca. 3.100 m² konnte ab 1988 erstmals die Bauentwicklung bis in die Neuzeit kontinuierlich erforscht werden, wobei etwa die Hälfte der Fläche systematisch ausgegraben wurde.

Die wohl wichtigste Beobachtung war die Feststellung der Landaufhöhung, die auf mehreren Parzellen ausschnittsweise zu beobachten war. Diese war notwendig geworden, da das mittlere Tidehochwasser kontinuierlich angestiegen war und eine Besiedlung auf der ursprünglichen Höhe unmöglich machte. So war eine Landaufhöhung notwendig geworden. Man grub Pfähle in den Untergrund, legte Holzbretter zwischen diese und der Innenraum wurde überwiegend mit Dungpackungen aufgefüllt. Zwischen diesen "Dämmen", auch in der älteren Lokalliteratur "Hasenrücken" genannt, verliefen Wassergräben, die zur Entsorgung von Unrat dienten. Diese Dämme waren zwischen 5 und 8 m breit und ca. 70 m lang, von Fleet zu Fleet gemessen. Dieses ergab eine ziemlich gleichförmige Parzellenabmessung, die auch an anderer Stelle auf der Reichenstraßeninsel ermittelt werden konnte. Der Höhenauftrag betrug ca. 2,50 m. Diese Beobachtungen weisen darauf hin, daß diese Landaufhöhung in einem Zug vorgenommen wurde, was eine bedeutende Arbeitsleistung darstellt. Die ältesten hierbei verwendeten Hölzer ließen sich dendrochronologisch in das Ende des 12. Jahrhunderts datieren. Die dendrochronologischen Untersuchungen wurden von Frau S. Wrobel, Ordinariat für Holzbiologie der Universität Hamburg, durchgeführt.

An der Basis einer dieser Dämme brachte man ein Bauopfer ein, das in heidnischer Tradition stehend ungewöhnlich erscheint. Es handelt sich um ein Pferd, dem mehrere Hühnereier beigegeben worden waren. Die Grube für dieses Bauopfer war in den Marschenboden eingetieft worden, darüber befand sich eine sorgsam verlegte Reisigschicht.

Der zoologische Untersuchungsbericht von Heidemarie Hüster ermittelte ein männliches Pferd im Alter von 4-4,5 Jahren. Die Widerristhöhe lag bei 140 cm. Ritzspuren an verschiedenen Knochen des Tieres lassen sicher erscheinen, daß vor der Deposition dem Pferd das Fell abgezogen wurde.



Abb. 6 - Bauflächen mit archäologischen Beobachtungen und Grabungen im Bereich der Reichenstraßeninsel seit 1988. Kartengrundlage mit dem Straßennetz und der Parzellenzuschnitte vor 1842.

Die Anlage einer Grube und die Deponierung des Pferdekadavers an der Basis erscheint jedenfalls nicht zufällig.

Ohne nach vollständigen Parallelen derartiger "Opfer" zu suchen, möchte man zumindest an das Bauopfer unter der karolingischen Wallbefestigung Münsters erinnern, wo ein Pferd mit einem Hund in einer Grube deponiert wurden. Obwohl dieses Beispiel bedeutend älter ist, zeichnet sich eine Sitte ab, die fernab christlicher Tradition steht.

Die neu geschaffenen Dämme, die nunmehr die Parzellenstruktur auf der Reichenstraßeninsel bis in das 19. Jahrhundert in ihren Abmessungen bestimmten, wurden alsbald bebaut. Das Grundstück, dessen

Struktur am umfassendsten untersucht werden konnte, trug zunächst (um 1200) eine Kemenate, ein Steinhaus, das aus Backsteinziegeln erbaut war und die ganze Breite der Parzelle einnahm und von der Reichenstraßenfront etwas zurück gelegen errichtet wurde. Damit ist erstmals ein Kemenatenbau in Hamburg archäologisch erschlossen worden.

Später wurde die Kemenate mit einem Wohnbau von mehreren Räumen, die allerdings nur fragmentarisch nachgewiesen werden konnten, erweitert. Der Grundriß ist nicht vollständig rekonstruierbar. Erkennbar ist aber eine weiträumige Diele im vorderen Teil des Erdgeschosses, die mit Kopfsteinpflaster versehen war. Es gilt aber noch immer, daß das Ge-

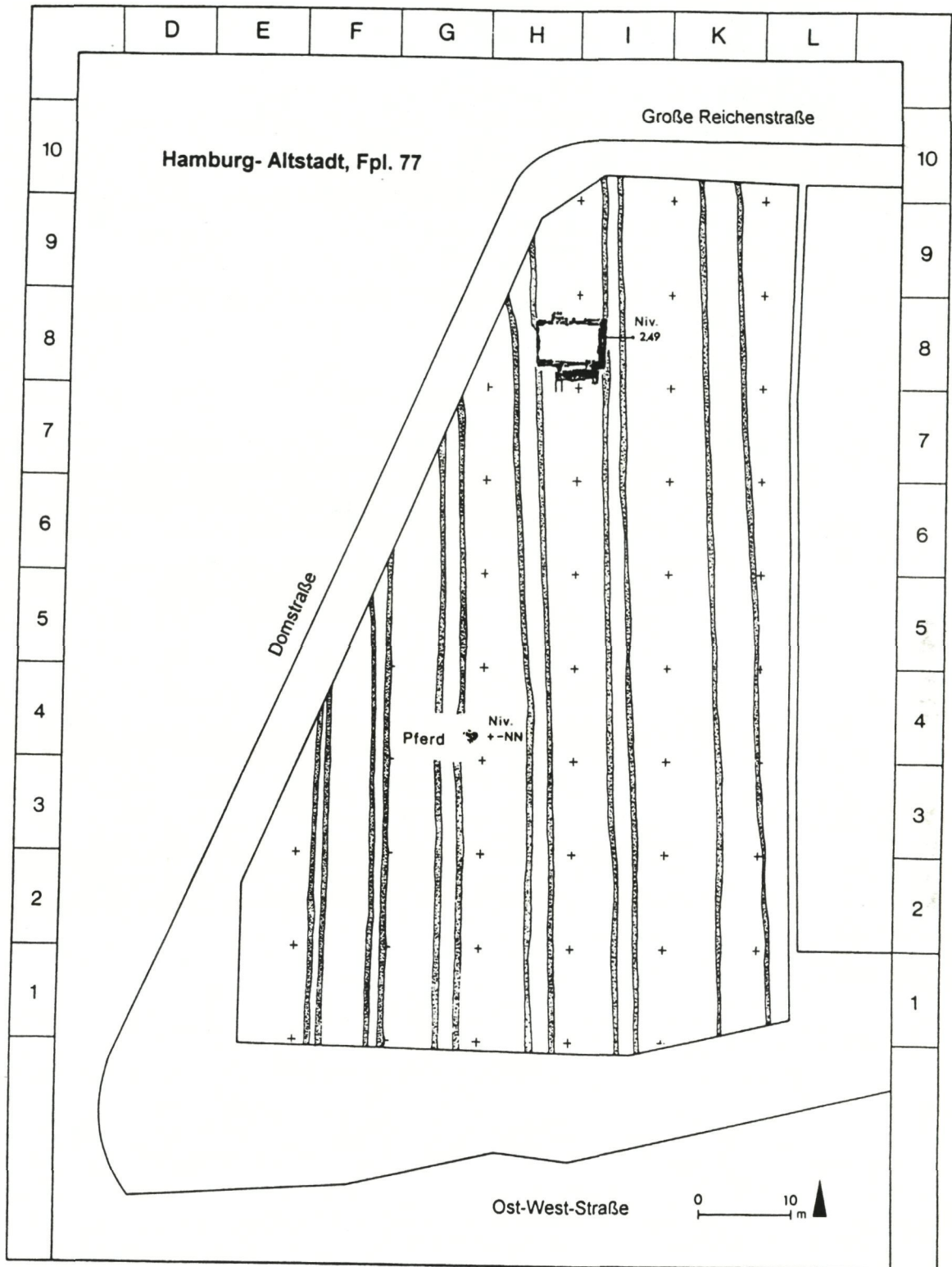


Abb. 7 - Erstbebauung nach der Landaufhöhung mit einer Kemenate, Fundplatz 77. An der Basis der Landaufhöhung auf einer Nachbarparzelle befand sich die Pferdedeponierung, 12. Jahrhundert.

bäude weiterhin zwar zur Reichenstraße hin orientiert war, aber die Parzelle nur sehr geringflächig bebaut blieb.

Langsam waren die seitlichen Wasserläufe verschlickt. Seit Ende des Mittelalters wurden in diesen durch Sedimentation zugewachsenen "Gräben" Abwasserleitungen verlegt, die aus Holz bestanden und

unterschiedlich konstruiert wurden, aber bis in das 19. Jahrhundert in Benutzung blieben. Ihre Abdeckung bestand aus Holzplatten, die zwecks Reinigung leicht aufgenommen werden konnten.

Erst in der dritten Bauphase wird das Grundstück in seiner ganzen Tiefe mit Gebäuden bebaut, von denen die Backsteinfundamente erhalten waren. Das

Hinterhaus nimmt nunmehr etwas mehr als 25 m in der Breite ein, drei Parzellen sind also vereinigt worden. Die mittleren Gebäude sind schmaler und dadurch wurde ein Innenhof gebildet. Damit zeigt sich eine Grundstücksgliederung, wie sie für die nachmittelalterliche Zeit typisch war und bis zur Zeit der Kriegszerstörung im 2. Weltkrieg Bestand hatte (Abb. 7).

Diese dritte Bauphase ist nicht in einem Zug errichtet worden, verschiedene Veränderungen erfolgten, aber dennoch war der Grundriß offensichtlich um 1630 festgelegt worden. Weitere Aufschlüsse über diese Bauphase erwarten wir durch die endgültige Auswertung der Befunde, die erst im Angriff genommen werden konnte. Eine Präzision über diesen Vorbericht hinaus ist also zu erhoffen.

Das gilt auch für das Fundmaterial, von dessen Darstellung wir nähere Aufschlüsse über die zeitlichen Abfolgen der Bebauungsphasen erwarten sowie über die wirtschaftlichen Tätigkeiten der einstigen Besitzer bzw. Einwohner der Gebäude. In den Dungauffüllungen der "Dämmen" fielen zahlreiche Lederreste auf, die offensichtlich auf eine Schuhmacherwerkstatt in der näheren Umgebung hinwiesen. Andere Funde belegen das Metallhandwerk. Zahlreich sind die Ergebnisse zur Sachkultur des Mittelalters, vornehmlich durch Keramik, aber auch durch alltägliche Dinge wie Spielzeug.

Bemerkenswerte Ergebnisse sind hier angedeutet, nähere Aufschlüsse sind durch die noch ausstehende Endbearbeitung zu erwarten. Schon jetzt zeichnet sich aber ab, daß diese Ausgrabungen einen wichtigen Beitrag zur Erforschung der Siedlungsentwicklung in der Altstadt Hamburgs geleistet haben.

Weitere Ausgrabungen auf der Reichenstraßeninsel haben ergänzende Ergebnisse erbracht, aber bedürfen intensiver Auswertungsarbeit (das Baugebiet Dovenhof und Hopfensack). Sie bestätigen aber im Prinzip die Besiedlungsgeschichte dieses Areals, wie es am Beispiel des Geländes Zürich-Haus dargestellt ist. Am Hopfensack, der westlichen Spitze der Insel, ist eine Ausdünnung der Besiedlung zu beobachten.

Landaufhöhungen, wie sie hier beschrieben sind, stellen eine bedeutende Gewinnung von Siedlungsareal dar, das unter günstigeren hydrologischen Verhältnissen bereits im 9. Jh. besiedelt wurde. Ähnliche Vorgänge sind auch in Schleswig beobachtet worden. Offensichtlich war die Orientierung zum Wasserweg aus verkehrstechnischen Gründen maßgeblich für diese große Arbeitsleistung.

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The Moot Question of Urbanism: Recent Excavations at Birka

During the years 1990-1995 a research excavation was carried out on the Viking Age town of Birka, in Central Sweden, under the auspices of the Central Board of National Antiquities (Riksantikvarieämbetet), directed by Dr. Björn Ambrosiani. As one of the supervisors on the site, I want to give a brief summary of the results of that excavation and to follow on by discussing some of the implications of the results for the wider field of Viking Studies and the old debate about the roots and development of post-Roman urbanism in Britain and Scandinavia.

The research questions posed at the beginning of the excavation were:

...’ to discover whether there was a coherent plot pattern in Viking-age Birka; the shapes of the plots; their permanency or otherwise; and the activities carried on within them. The ecological interaction between Birka and its hinterland during the two centuries of the town’s existence, and the environmental changes in the town and beyond are also part of the strategy’ (Ambrosiani 1992, 83).

The wider academic implications of this rather specific agenda are substantial. A planned layout and permanency of plot boundaries clearly demonstrate control of the organisation and function of the settlement by an higher authority, while the activities carried on within the settlement provide evidence of the functional and ideological role of the site and its relationship to its hinterland. The interlinked ecologies of site and hinterland reflect the most basic roots of subsistence which allowed the creation of a large, non-agricultural settlement, and reveal the patterns of culture and power which maintained it.

All these questions have had to be answered for a deeper understanding of the development of Birka as a site, and its role in relation to social changes in North-Western Europe during the Early Mediaeval period. As usual, however, the excavation has raised as many questions as it has answered.

Birka is situated on a small island in Lake Mälär, west of Stockholm (see fig 1), and has attracted antiquarian interest since the 17th century. The island has been farmed throughout the second millennium,

with particular concentration upon an area known as ‘Svarta Jorden’ i.e. the Black Earth, for arable cultivation. This area, in which the soil is black with a high concentration of charcoal, has always been productive of both good crops and archaeological artefacts. To the north lies a large hill fort, to the south a rampart and extensive barrow cemeteries (see fig 1).

During the 1870s, excavations in the area of the Black Earth were carried out by the entomologist and anthropologist, Hjalmar Stolpe. After some five seasons of work, with a belated recognition that his technical ability was inadequate to interpret the structural record of this complex, dry stratigraphy, he turned his attention to the cemeteries and carried out several seasons of outstandingly competent excavation, which resulted in a large corpus of both finds and records later published by Holger Arbman (Arbman 1943). As a result of Stolpe’s and Arbman’s work, the dates of the site were set at c. AD 800-970, based on typological dating of the grave finds, tied to the numismatic material.

Excavation at Birka during this century has been limited by the fact that the archaeological areas are owned and strictly protected by the government. There is no threat of development, and resources for research excavation have been scant, although an excavation between 1969 and 1971, carried out by Dr. Björn Ambrosiani and Dr. Birgit Arrhenius, discovered the foundations of a jetty (Ambrosiani & Arrhenius 1973). During the late 1980s, however, a major grant from TetraPak AB allowed a larger project to be planned, which began in 1990.

A trial trench, 10 x 5 m was opened in 1990, revealing an unexpected depth of complicated, dry stratigraphy, the edge of a large, stone foundation and parts of at least three buildings. This trench was expanded in 1991, to cover the entire area of one plot, bounded to north and south by narrow lanes, and half of a further plot to the south (see fig. 2). Half of the area was damaged by later disturbances, which when emptied proved to be parallel strip trenches, running north-south, varying between 1.2 m and 2 m in width and extending to the natural subsoil in some areas. In

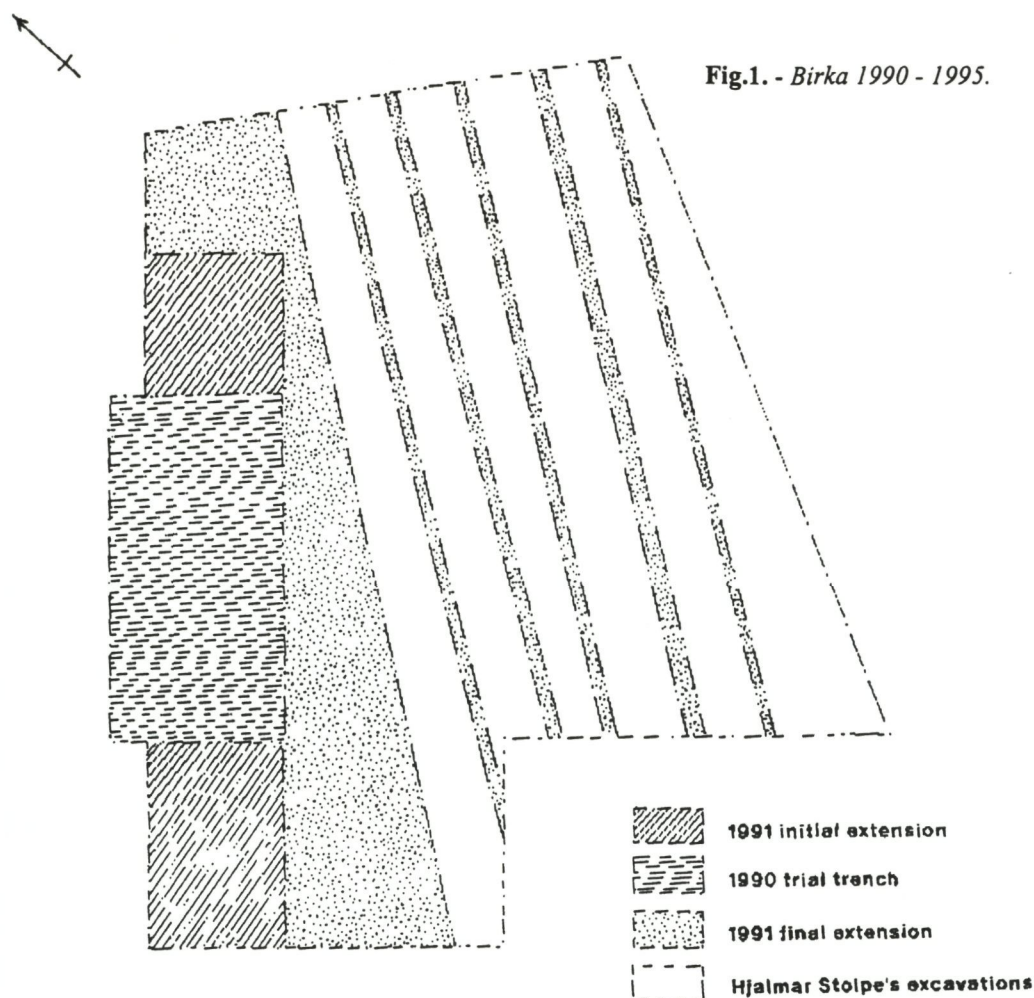


Fig.1. - Birka 1990 - 1995.

other areas the bottoms of the trenches were systematically pitted down to the subsoil. These were some of the trenches opened by Stolpe in the 1870s, and, when emptied, they gave a preview of the earlier deposits on the site.

In following seasons it became clear that the town had been founded during the third quarter of the eighth century. At that time, the area of our excavation lay immediately on the shore line, so the lowest deposits, which were contemporary with the stone foundation of a jetty, were laminated flood deposits of sand and organic material interspersed with finds from the upslope area of the site. The dating of this material derives from the presence of a type of bead produced in Ribe in Denmark, and also found at Birka. These wasp beads are particularly fragile and were produced in Ribe during a limited period dated by dendrochronology to between ca AD 760-780 (Stig Jensen, pers. comm.). The earliest anthropomorphic deposits predate these beads, suggesting a foundation date for the site in the early third quarter of the eighth century. At the eastern edge of the site, boundary ditches extended in from the unexcavated area upslope. These related to the line of the stone

foundation of a jetty and are together the earliest structures on the site.

In the fourth quarter of the eighth century, a bronze casting workshop was established on the site, contemporary with extensions of the plot boundary ditches with fences. After a short period, the building was renovated and extended, contemporary with the construction of another building on the same plot. This pattern of two parallel, related buildings dedicated to bronze casting continued for a period dated by the finds to approximately a century, to be followed by a probably short period of abandonment, and the building of two parallel buildings whose function is unclear. Throughout the occupation of this plot, the evidence for a combination of industrial and domestic functions is substantial. Finds suggest that even in the later phases, the industry was probably metalworking of some type – lead and silver working has been suggested.

The plot in the southern half of the excavation was not completely dug, but the successive buildings in the excavated area seem to have been primarily domestic in function, though scattered cullet fragments in the earliest of the three phases of occupation

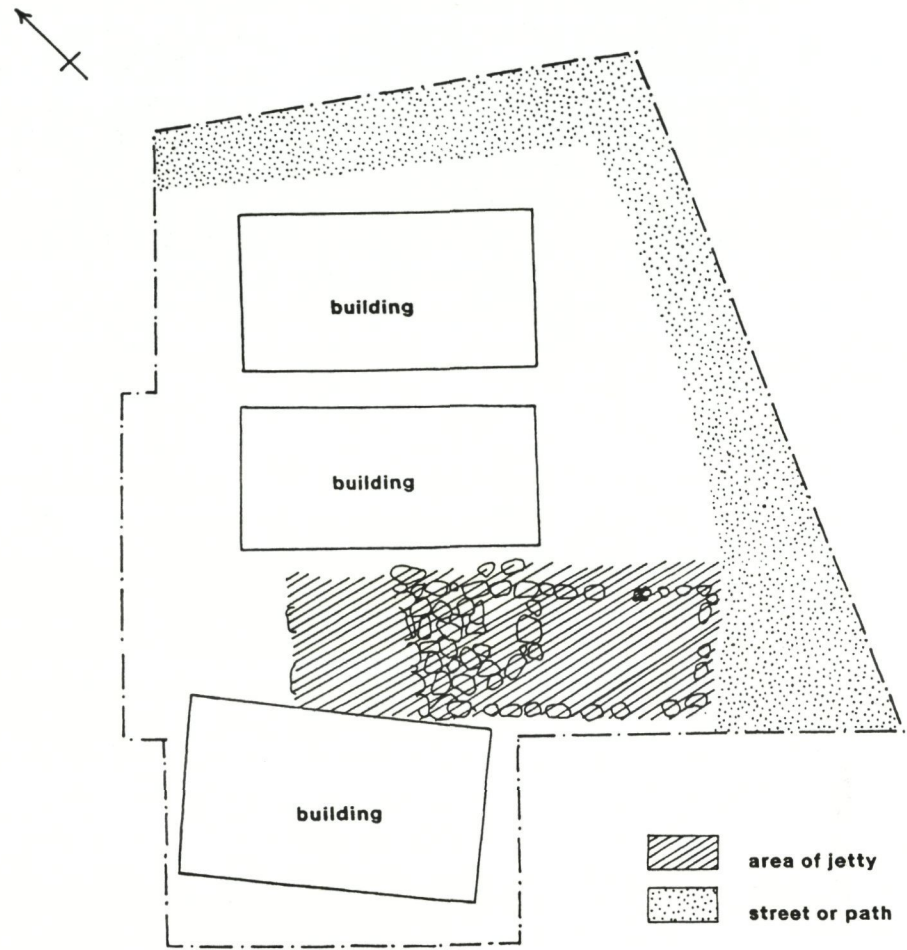


Fig. 2. - Birka 1990 - 1995.

suggest that there may, at some stage, have been small scale glass bead manufacture here. Finds of weapons, including a shield boss, scabbard chape and arrow heads, from the second of the three phases, which was destroyed by fire, suggest a relatively high status for this building.

To return in summary to the initial research questions posed of the excavation – the site was planned from its inception, and the plot boundaries were controlled and monitored over a period of up to two and a half centuries. As the waterline receded due to isostatic readjustment (Ambrosiani 1985), new plots were laid out, and these were also monitored and controlled. This suggests some organising power – borne out by frequent documentary references to a royal steward in charge of the town in Rimbert's *Vita Ansgarii* (Rimbert 1986, 28, 35-41). The site was densely occupied and multi-functional, heavily dependant upon imported produce from the surrounding farmland to support a population of between 700 and 1000 per generation (Ambrosiani 1985, 107). The lack of English coinage of the third quarter of the tenth century (Zachrisson 1992, 61), which is commonly found in the Mälär Valley suggest that the site

was abruptly abandoned in the early third quarter of the tenth century.

These results, showing an unexpectedly early and complex settlement of urban type, lead to further questions and research problems. The importance of the recent excavation lies in its illumination of two areas of particularly radical departure from the local tradition of trade and manufacturing sites: firstly, the physical size and complexity of the settlement show a staggering break when compared to earlier Swedish sites such as Helgö. Helgö is estimated to have had a population of c.17 per generation, compared to Birka's 700-1000 (Ambrosiani 1985, 107). The architecture of the earliest buildings in the centre of the urban area is unlike that of contemporary rural sites, where the post-built halls and longhouses were prevalent, and seems to consist exclusively of structures built on a ratio of 1.5-2 : 1 (length : width), with a width of 4-5 m, and varying widely in their construction methods depending on their function. The repertoire of building techniques ranges from substantial post and sill-stone walls with internal panelling to flimsy wattle screens. In contrast to rural buildings, room divisions are common, and aisled constructions rare. The scant

evidence for longhouse or hall building in Birka all comes from the edge of the town, adjacent to the rampart (Holmquist Olausson 1993).

The second major difference between Birka and earlier sites lies in its function in relation to its hinterland. The volume of manufacturing, as measured by quantity of industrial debris, is greater than on earlier sites, probably because evidence suggests that Birka was from the beginning a permanent rather than seasonal manufacturing centre. The size and permanence of the site also have as their prerequisite a substantial subsistence trade based upon agricultural surplus from the hinterland, and the animal bone types from Birka are closely related to those from contemporary rural sites both in distribution of species and cut (Bengt Wigh and Kenneth Svensson, pers. comm.). Birka could never have been self-sufficient. There is no evidence for large scale subsistence trade in Sweden earlier than this site.

There is a similar dearth of comparable earlier and contemporary sites from the second half of the eighth century in the rest of mainland Scandinavia. The closest parallel structurally, and in volume of trade and manufacture, is the eastern Jutland site of Hedeby, now in northern Germany. Extensive excavations here under the direction of H. Jankuhn (Jankuhn 1986) and latterly Prof. K. Schietzel (Schietzel 1981) have revealed a site with architecture and urban organisation which are to all intents and purposes identical to those of Birka, though the settlement itself is very much larger in area. However, the earliest dendrochronological dating of the urban-type settlement at Hedeby is the early ninth century (Clarke & Ambrosiani 1991, 63) although there is substantial evidence for earlier, probably rural, trading settlements in the immediate area.

Ribe, on the western coast of Denmark, is earlier, with a good dendrochronological date to the first decade of the eighth century. The excavator, however, is convinced that this site started as a seasonal market, and was not permanently occupied until later in the century (Jensen 1991, 7 & Feveile 1994, 91-2). This would fit Ribe into the pattern of seasonal trade and manufacturing sites, effectively market places, which are beginning to emerge as a class of site from the eighth century, all over Sweden and Denmark (Ambrosiani 1992, 152), and include sites such as Sebbarsund, on the Limfjord in northern Denmark, Åhus in Scania (Callmer 1994, 56) and, later, Paviken on Gotland (Lundström 1981). Some of these sites, including Ribe, do become permanent settlements during the early ninth century, others continue as seasonal markets. Their permanent populations in the eighth century seem to be small to non-existent.

In Central Sweden itself there are no similar

contemporary sites; centres of political power such as Gamla Uppsala, Alsnöhus and Forn Sigtuna show no signs of the kind of intensive occupation which characterises Hedeby and Birka, despite their concentrations of rich burials and imported goods. It has been suggested that the proximity of Alsnöhus and Birka is significant, and reflects a royal control of the trading settlement itself; this remains to be proved, but given the later documented royal status of Alsnöhus, and the suggestions in Rimbert that Birka was under the direct control of the king (Rimbert 1986, 27-28), is a strong possibility. Some sort of centralised control of the settlement is certainly indicated by the rigidity of the plot boundaries, which varied only c. ± 0.2 m over two centuries.

Later settlements throughout the Scandinavian world show remarkable similarities to the plan of Birka. Identical architectural forms and urban organisation have been recorded in Hedeby, as mentioned, but also in the earliest deposits in Birka's successor settlement, Sigtuna (Bäck & Carlsson 1994, 113-4), and in York (Hall 1990, 382), and Dublin (Wallace 1992).

The functions of the settlement at Birka quite clearly included both trade and manufacturing. Imports in the lowest, i.e. earliest, deposits included material from both the Slavic and more westerly areas. The geographical trends in the imported ceramics have been quantified by Mathias Bäck in an article published in 1995, which demonstrates that the proportion of western ceramics, the majority of which are from Germany and the Low Countries, decreases steadily from the eighth century contexts, to virtually nothing in the tenth century contexts (Bäck 1995). This decreasing western influence is also visible in the bone and antler, with so-called 'Frisian' combs only present in the eighth century levels (Michél Carlsson pers. comm.). It is intriguing to speculate that this change is the result of the progressive expansion of the Russian colonies from the end of the eighth century¹, whose positions on the trade routes up the Russian river systems of the Dnepr and Volkhov indicate links into the Baltic trade network with which Birka was also closely connected.

It is difficult to know what term to use to describe the volume of craft production demonstrated at

¹ The northernmost of these settlements, Staraja Ladoga on the Volkhov, has a foundation date of c. 760 from dendrochronological material; Ryurikovo Gorodishche, a little further south, has a finds based date of the second half of the ninth century or earlier; Gnezdovo, on the Dnepr, is dated to the mid-late ninth century, or the first half of the tenth century, again based on the finds (Clarke and Ambrosiani, 1991:120-123).

Birka. 'Industrial' implies mass production as characteristic of the post-mediaeval development of Western Europe, but though lesser in volume than this, Birka's craft production was certainly very much more intensive and well organised than that on any other earlier or contemporary site in Sweden. The metal workshops excavated during the recent excavations provided evidence of year-round production through a period of at least one century, possibly more, using a variety of metals (bronze, lead and the precious metals) and manufacturing a variety of objects. This is certainly an organised, industrial-type, craft as characteristic of the later mediaeval towns.

Excavations in the area of the southern rampart by Lena Holmquist Olausson (Holmquist Olausson, 1993) have revealed the remains of a hall, built on one of several terraces, all of which were probably building foundations. This suggests that at least one part of the settlement was occupied by a high-status group, or group with a different role in the society, and this is supported by the wide variety of grave furnishings from the cemetery excavations (Arbman 1943).

Birka, then, appears to have been an organised, densely occupied, multi-functional settlement, from its foundation in the mid-eighth century. While this is an exciting result in itself, its wider implications in terms of the study of the development of urbanism in Scandinavia are profoundly stimulating. It has been suggested that the impulse for the creation of towns in Scandinavia came from the exposure of the Vikings to Western European urbanism during the ninth century. This, however, must now be abandoned as a serious thesis for two important reasons: the first is the early date of the Scandinavian settlements, particularly Birka, which demonstrates fully-fledged urbanism nearly fifty years before the first documented raid on Western Europe. The second reason is the physical contrast between the Scandinavian early towns and contemporary settlements in Western Europe, which demonstrate much less strict topographical organisation, and different architectural forms.

Birka was abandoned at the beginning of the fourth quarter of the tenth century. A number of factors must have been behind this (apparently complete) clearance of the site. Physically, the continuing relative fall of the water line must have caused problems in handling ships of increasingly deep draught, both at the harbours of Birka itself, and at the important southern access to the Mälaren, the Södertälje portage. Politically, the scant documentary sources for the period suggest a shift in the focus of power to a branch of the royal kinship whose base was on the northern side of the Mälaren, in Götaland

(Tesch 1990, 23). Ideologically, the official conversion of Sweden, after a long period of mission from the diocese of Hamburg-Bremen, also occurred at this time. It is very probable that a combination of these factors was behind the abandonment of the site, and the completeness of that abandonment reinforces the impression of a strong link between centralised political power and control of the town. Controversially, it has been suggested that the population of Birka was moved directly to the town of Sigtuna, on the northern edge of the Mälaren (Bäck & Carlsson 1994, 118). The archaeological evidence in no way contradicts this idea, and the earliest material from Sigtuna, both structures and finds, shows very marked similarities to that from Birka (*op.cit.*).

It seems possible that in the planning and establishment of the earliest towns in mainland Scandinavia, elements of design and function were derived from many sources. The architectural forms characteristic of these settlements do not derive from the rural architecture of Scandinavia, though the fixed, narrow plots relating to a water line and parallel road may have their roots in the earlier seasonal market places typified by Ribe. The density of occupation and controlled trading/manufacturing functions may show influences from contemporary Low Countries sites such as Dorestad, while the relationship between enclosed settlement and hill fort has similarities to smaller, earlier and contemporary settlements in the Slavonic area such as Starigard (Clarke & Ambrosiani 1991, 108-9). The appearance of such a fixed pattern of settlement type in an extremely short period of time, and its success as a form over succeeding centuries lead one to speculate on the possibility that this may be one of the rare occasions in the archaeological record where the influence of one individual as planner/executor can be identified.

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An early medieval settlement at Guildhall, City of London

Background

Rescue excavation of the Roman amphitheatre site next to the medieval Guildhall of the City of London was undertaken in several phases from 1987-1996 by the Museum of London Archaeology Service. The area is being redeveloped by the Corporation of London as a new Art Gallery. In recognition of the importance of the archaeology the site was scheduled by the Department of the Environment in 1988, and planning consent was given on condition of full excavation of all deposits. The last phase of excavation finished in November 1996. A substantial programme of post excavation analysis has just begun,

and therefore the dating and interpretations offered below are only provisional.

The site lies in the north-west corner of the city within the area bounded by the Roman and later medieval city wall (see Fig. 1). Along the western side of the site, under the present Guildhall Yard, up to six metres of complex urban stratigraphy survived, from deposits associated with the Roman amphitheatre through to evidence for medieval buildings, and Yards associated with the medieval Guildhall itself. The medieval and later Yard deposits, along with the relative lack of intrusive activity, effectively sealed the underlying archaeology and created anaerobic conditions similar to those of 'wet sites'. Con-

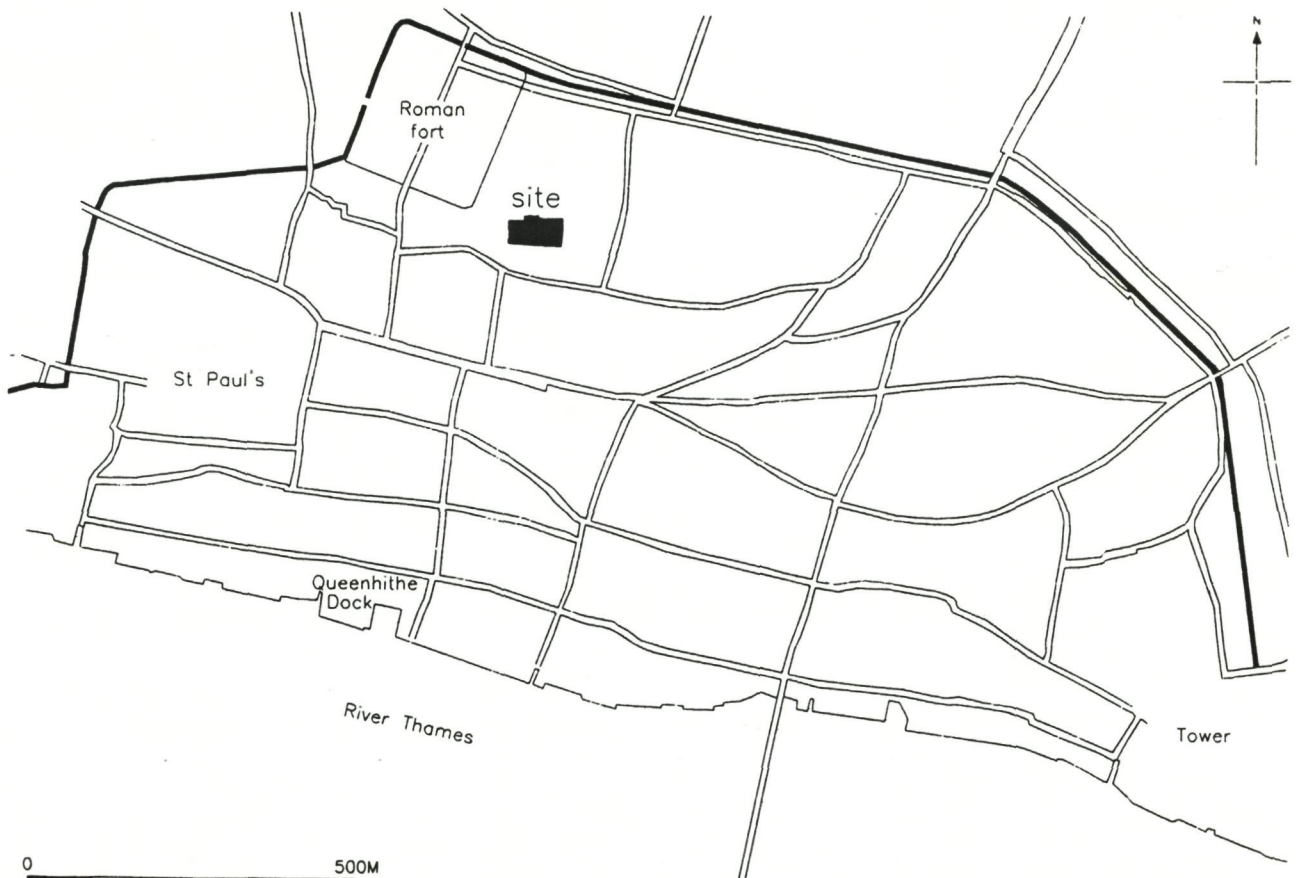


Fig. 1. - Site location with City wall and major Medieval streets.

sequently, there was good survival of wood and organic deposits, even though the site lies on relative high ground.

The area under the Yard will be provided with a single basement only, and so there was no requirement to excavate all the archaeological deposits. Fortunately, the OD height which we were required to excavate down to, co-incided with a major hiatus in the sequence (ie: the beginning of the Saxo-Norman settlement); and excavation and recording of service trenches and engineers test pits through to the natural deposits below the amphitheatre arena allowed us to build up a picture of the complete archaeological sequence beneath this settlement.

Disuse of the amphitheatre

The amphitheatre appears to have gone out of use in the mid fourth century (Bateman 1997, forthcoming). Subsequently the homogenous 'darkearth' deposit, as identified both in excavation and by R. McPhail in micromorphological sampling (McPhail & Cruise 1995), accumulated or was deposited in the arena and over some parts of the bank and seating area (Bate-

man 1997). Within the area of the arena, the surface of this deposit displayed a pronounced slope down to the north-east. The arena itself had been beset by drainage problems and, from the evidence of OD heights and environmental sampling, one can speculate that, by the end of the 10th century, the amphitheatre survived as a boggy hollow.

At the top of this sequence of accumulation or dumping, an area in the south west corner of the site, on the higher ground, was enclosed on its north and east sides by wattle fencing, with a metallated pathway leading in from the east. This enclosure, as yet undated, may be the earliest churchyard associated with the precursor(s) of St. Lawrence Jewry to the south, since, following the dumping described below, the area became used as a burial ground (see Fig. 2). Some time in the early 11th century, a single act of dumping and levelling occurred, sealing the whole of the area under excavation. This had the effect of correcting the prevailing slope, filling the hollow, and providing level ground for subsequent activity. Expansion and growth into the north of the City at this time is well attested, and the development of this 'marginal' land in the north western sector must reflect this pressure on land.

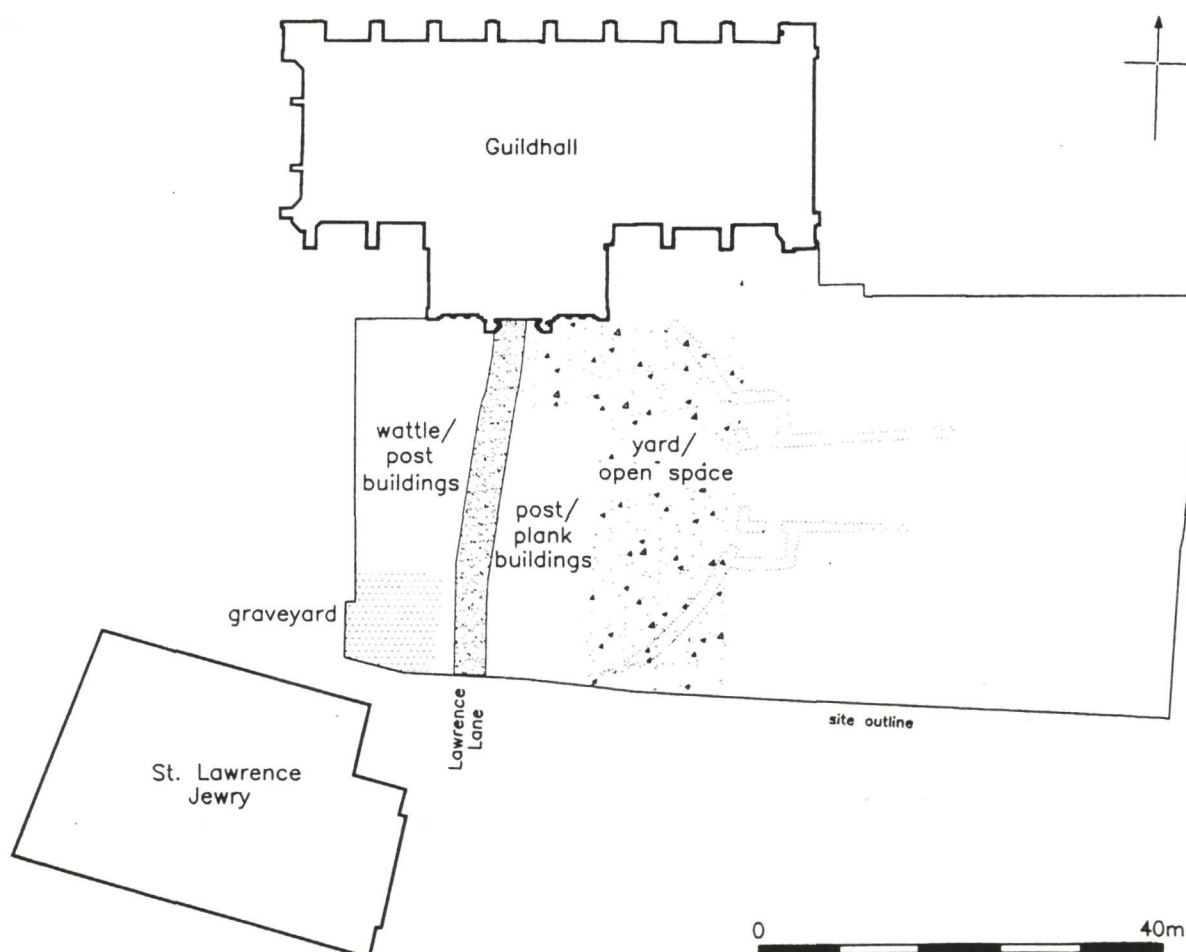


Fig. 2. - Early medieval settlement with Roman amphitheatre ghosted.

The burial ground of St Lawrence

As mentioned above, the compound in the south-west corner was re-enclosed on its north and east sides and began to be used as a burial ground (see Fig. 2). These burials will be discussed elsewhere at this conference (Bateman); but it should be noted here that two dendrochronological samples from coffin timbers have yielded dates of 1046 and 1066, with many more yet to be processed. Also, the burial practices display many parallels with contemporary Scandinavian inhumations, from sites such as Trondheim and Lund. The origins of the church of St Lawrence Jewry are unclear from documentary sources; the earliest documentary references date from the late twelfth century (Harben 1918), and there is an unsubstantiated tradition that the church was founded in 1136. The discovery of this burial ground implies the existence of a church to the south by the mid 11th century, in the same position as St Lawrence Jewry occupies today. It is worth mentioning here that St Lawrence was a popular dedication in early Scandinavian churches, notably at Lund cathedral (Hugh Farmer 1992).

Contemporaneously, the surrounding area immediately to the north and east of the churchyard was characterised by sporadic pitting and flimsy scraps of wattle fencing, whose function are as yet unknown, although one might guess at animal husbandry. In the north eastern sector, there was a series of intercutting ditches or trenches, oriented both north-south and east-west. Some were shallow, some up to 1.2 m deep, and butt-ended where the ends were seen. At the time of excavation they were thought to be water management features; an attempt to drain this low lying boggy ground. This was borne out by the results of micromorphological analysis, and R.Mcphail was able

to demonstrate the waterloggedness of the area. He also identified cattle trampled horizons, which suggests that these ditches might have been used secondarily to water and corral cattle. It is possible that quite substantial numbers of cattle were involved, which suggests commercial activity. It is also possible to calculate that an area of at least 300 sq metres was an "open space" at this time (this includes part of the area excavated to the east in previous phases of excavation), and that plus the presence of large numbers of cattle, could imply the existence of a cattle market here. The upper fills of the ditches are provisionally dated to c1090, after which the settlement described below advances northwards and occupies this area. To the east, the large open space continued in use throughout the life of the settlement (see Fig. 3).

Lawrence Lane

Dating of the material culture has not been completed or refined as yet, but provisionally it seems that around 1070, a number of domestic dwellings were constructed flanking a north-south lane or alley, which bisected the area under excavation (see Fig. 2). Unfortunately, most of this lane was removed by later intrusive activity (a modern sewer), but sufficient survived to demonstrate that it remained in use for the duration of the settlement and beyond. At its north end there was an unbroken sequence of external surfacing up to what is now the open space known as Guildhall Yard. There is a mention of a Lawrence Lane leading from the Guildhall to Cheapside in the late twelfth century (Wilson 1938), and although there is some debate as to the exact location and date of the early Guildhall, it seems highly likely that this stretch of metalling represented the northern part of the lane.

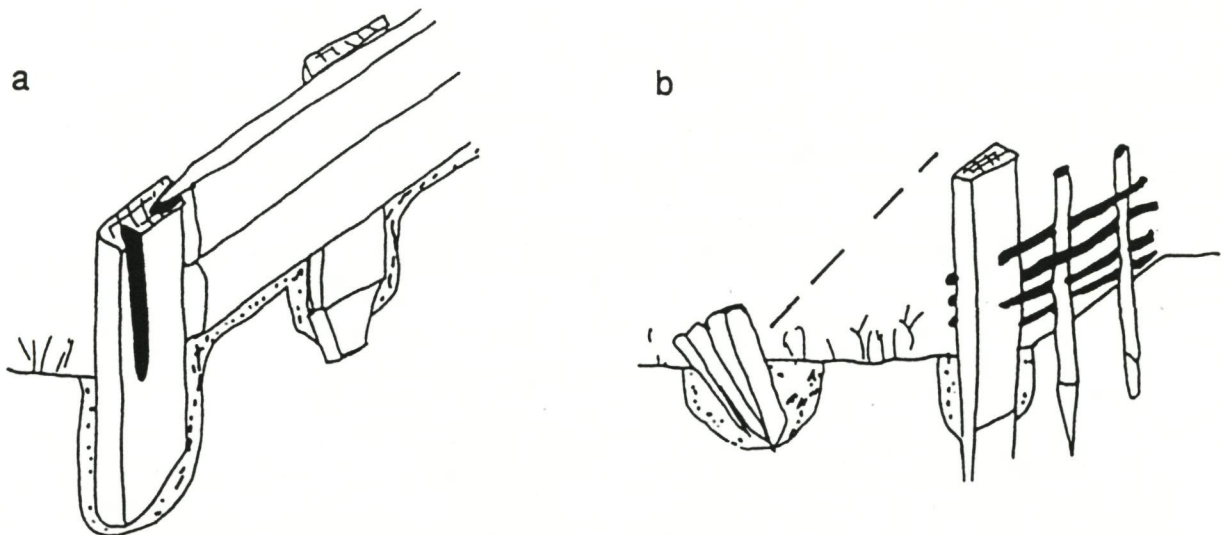


Fig. 3. - a) bulwark wall construction, b) post and wattle walls, often buttressed

If so, what did it lead from at this much earlier date? – an earlier version of a hall which was part of this systematically laid out settlement? or did it merely lead north towards the City wall?. This, along with much other information derived from the recent excavations, may help in resolving the location of the early Guildhall. The alignment of the lane and the buildings is determined by the earlier burial ground and church, which themselves are not oriented truly east-west, but respect the early medieval street pattern, rather than features or topography relating to the underlying amphitheatre. This would imply that the amphitheatre as a topographical feature had all but disappeared at this stage.

The timber buildings

Work has barely commenced on the detailed analysis of the timber buildings at Guildhall, but some initial observations can be made. There are significant differences between the buildings on the west and those on the east of the lane. On the west, they are aligned with the long axis east-west, so that they are 'end on' to "Lawrence Lane", whilst on the east they are aligned with the long axis north-south, so that they are parallel to the lane. The buildings on the west are exclusively wattle and post, while those on the east are largely grooved post and plank buildings, sometimes incorporating wattlework.

At this early stage in the post-excavation programme, it is not possible to provide detailed, grouped, drawings of these buildings, although these will be available in time for the conference proceedings. On the west side, the best preserved building was a surface laid, wattle and post building measuring 5.10 m x 9.70 m (although truncated at both east and west end), which, unusually, made use of earthfast internal roof supports and external buttresses (see Fig. 3). It was continually repaired and modified throughout its use, generally as a result of fire damage. Some of the repairs were fairly substantial, such as the rebuilding of the entire south wall, whilst retaining the rest of the property. Much of the timber was re-used, implying a general scarcity of good quality building material which might explain why properties were repaired rather than completely rebuilt. The building was transversely divided into three with the entrance at the east end of the south side, (subsequently moved to the west end of the south side), opening onto an east-west alleyway (which apparently only lasts for as long as this property). There may have been a centrally placed hearth which was later truncated, but there was also an obvious kitchen area partitioned off in the south-west

corner of the building, with several phases of wood lined box hearths. Turf benches on the north and south long axes provided the seating and sleeping arrangements. Floors were generally of beaten earth, although brickearth was used occasionally. There was more partitioning at the eastern end of the property and, hopefully, micromorphological analysis will provide more information concerning the function of these areas. This structure, in terms of its use of angled buttress posts, bears comparison with contemporary structures at Haithabu (Elsner, undated) and Lund (Wallace 1992). Initial obvious similarities to the earlier Viking buildings at Coppergate (Hall 1994) and Dublin (Wallace 1992) disguise essential differences with regard to position of entrances, hearths and internal roof supports.

In London, excavations at Bull Wharf in 1995, on the eastern side of Queenhithe dock, (see Fig. 1), revealed similar buildings dating at least up until the mid 11th century (Ayre, Wroe-Brown and Malt, forthcoming). These are the only other known buildings of this type in the City of London, and thus may be one reason for establishing a link between the two sites.

On the east side of 'Lawrence Lane', the buildings were predominantly of post and plank walling, where the horizontal planks were slotted into longitudinal grooves carved into earthfast upright posts (see Fig. 3). Unfortunately, no complete ground plans were recovered for any of these buildings, but the largest one measured at least 8.70 m x 4.60 m, and was divided transversely into three by post and plank partitions. The hearth was centrally placed on a beaten earth floor, and the entrance was probably at the north end of the building, which was destroyed by later pitting. Again, this building was modified and repaired, with much replacing of individual posts, and rebuilding of internal partitions, sometimes in wattlework. Micromorphological analysis has demonstrated what was suspected during the excavation of these buildings (Mcphail 1995), and that is the apparent cleanliness of the floors. There was very little organic debris and no dung of any kind; a sharp contrast to the floors of the wattle and post buildings on the west side. This, together with the apparently more substantial nature of these structures, might indicate that they were of higher status. Possibly the roofs of these buildings were shingled, as several shingles were re-used as post pads or discarded as waste.

A re-used, complete, post with vertical grooves was recorded in the 11th and 12th century waterfront embankments at Billingsgate Lorry Park (Brigham 1992). Its dimensions suggest a wall height of c.1.5m, and that it was attached by pegging, to a wall plate at the top.

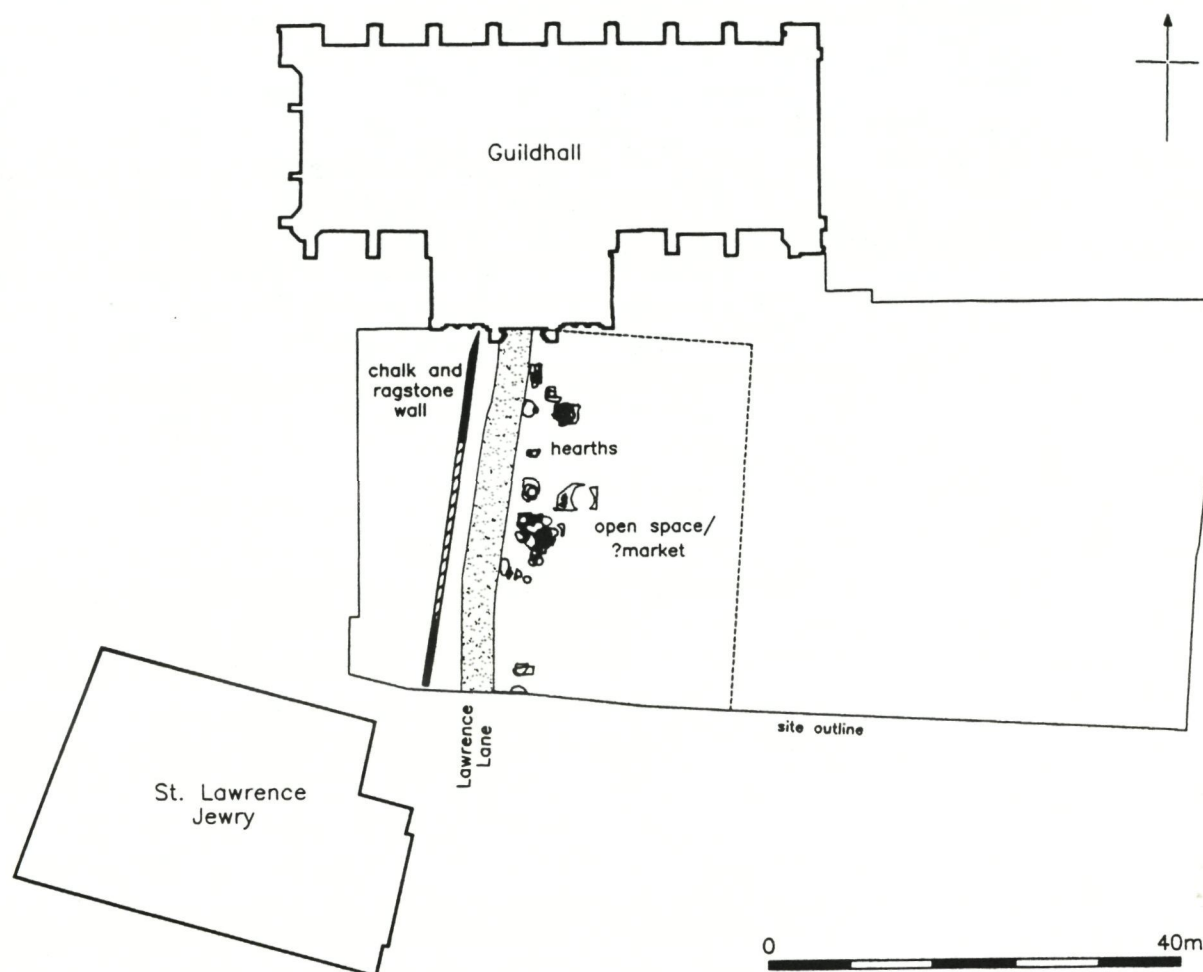


Fig. 4. - The site in the 12th and 13th centuries showing the enclosure of the western side of Lawrence Lane, and the yard/market on the east.

There are very few other examples of this type of construction recorded in London; which may not be merely a reflection of the comparatively rare survival of timber. The only other possible example in a domestic structure was recorded at Pudding Lane (Horsman 1988). Elsewhere it was used in the lining of a well at Cheapside (Woodger forthcoming), and several vertically grooved posts were re-used in the 12th century revetment at Seal House (Steedman, Dyson & Schofield 1992). More significantly, the technique was used at Bull Wharf in the waterfront revetments dating from c.1145-1165. It was also used here in the lining of a 12th-century cess pit (Ayre, Wroe-Brown & Malt forthcoming). In Northern Europe, particularly in Denmark where it is known as *bulvaerk* (Goodburn 1994), this technique was used in early medieval contexts in domestic buildings at Haithabu (Elsner undated) and Thule, and in the linings of wells at Lund (Wallace 1992). Links had already been established with the town of Lund, as it was the site of one of the Danish royal mints set up by Cnut, with the help of English moneyers.

It is clear, then, that the building techniques used in the early medieval buildings at Guildhall have distinct Danish parallels. Burials at the contemporary churchyard of the church of St Lawrence also demonstrate Danish influences, including the practice of interring willow or hazel staffs and bunches of rods with the body (Bateman, paper at this conference). It would not be unreasonable to infer a significant Danish presence at this settlement.

Conclusions

So much for the form; what of the function? It was tentatively suggested earlier that there was some evidence for a cattle market at the site. This was due to the presence of cattle trampled horizons, and the existence of a large open space on the east of the site. Some time in the 12th century, the timber buildings described above were knocked down, which coincidentally mirrors the decline of Scandinavian trade with London (Poole 1955). The west side of 'Lawrence Lane' was enclosed by a chalk and ragstone

wall, and redeveloped anew; the open space on the east side however, now expanded to reach as far west as the lane. Ranged along the west side of this space or Yard, were what can only be described as 'cookshops'. These were substantial, well constructed, poured brickearth and cobble hearths and ovens (see Fig. 4). In total there were about forty of them and they were associated with the various metallings and beaten earth surfaces of the open space or yard. These 'fast food' outlets must have catered to people assembled in this Yard, for purposes of marketing or public meetings, or both; as one may have developed out of the other. If a market did exist here in the late 12th and early 13th centuries, it may have developed out of an earlier one run by Danish merchants, known to have had privileged trading status (Bateson 1902), who also settled here. Their market might have provided an outlet for goods arriving at the port of Queenhithe, on the east side of which were buildings and waterfront structures of this period which also demonstrated Danish influences. Analysis of the material culture from Bull Wharf has begun to turn up some very interesting evidence for direct trading links with Scandinavia (Lyn Blackmore, paper at this conference). Further evidence for a market place here may be suggested indirectly by the existence of Blackwell Hall. Built in the 13th century, initially as a private dwelling, on the east side of the open space or yard, it later housed the main wool and cloth market for medieval London. Perhaps this was the formalisation and enclosure of an open air market originally founded by Danish traders, which survived the disappearance of their settlement, and the diminution of their influence.

It is possible also that the medieval Guildhall grew out of the need for formalisation of the various public assemblies which might have taken place in this Yard, such as the court of Hustings which was Danish in name. Initially a body concerned with the regulation of weights and measures, and later the principal court of the medieval city, "it provides early evidence of the link between trade and urban administration" (Dyson & Schofield 1984). If further analysis of the site record and material culture bears out this hypothesis of a Danish settlement at Guildhall, it will have profound implications for the origins of the singular administration and government of the City of London.

Acknowledgements

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From settlements to cities.

Alanian proto-cities of the 1st-2nd mil. AD in the North Caucasus

The present paper deals with the evolution of Alanian settlements and is based on the data yielded by two major Alanian sites, Zilgi and Kiafar. These sites mark the early and final stages respectively of Alanian culture and there is a chronological gap of some 500 years between them. Given the somewhat exotic nature of the subject in the eyes of our European colleagues, I would like to touch briefly upon the history of the Alans before coming to the point.

In the 1st-early 2nd millennium A.D. Central Cis-caucasia was inhabited by the Alans who have been the subject of extensive debate: who were they, when and how did they appear in the Caucasus? It is worth expanding on the facts and hypotheses which have been accepted by most specialists of the history of the Caucasus. The Alans were really a union of Iranian-speaking tribes. They emerged in the 1st c. A.D. and would be the main political force in the Caucasus for a thousand years. The Sarmatian tribe of Aorses became the base for the formation of the Alanian union. The latter also included other Iranian tribes, some of whom had close contacts with Central Asia. Thus the Alans were never at any point a mono-ethnic group. There is no sign of any ethnic consolidation until the second half of the 1st millennium and the process of consolidation involved the aboriginal tribes of the Caucasus, peoples speaking north Caucasian languages. To simplify this complicated process, it can be said that the Alanian ethnic group came about as a result of the interaction of immigrant Iranian nomadic tribes with a locally settled population. By the 1st century A.D. war-like Alans were beginning to play an important part in political events in the Caucasus and beyond. They were often a threat to their more peaceful neighbours. In 376 A.D. the Alans and the Huns appeared in Europe, reaching the Danubian boundaries of the Roman empire. From the 5th century onwards, the Alans entered the orbit of the political and economic interactions of Iran and Byzantium. Iran controlled a considerable section of the caravan routes from China and India known as the Great Silk Road and aimed at ownership of the access to the Black Sea. Byzantium on its part tried to keep

these routes in its hands. However, the northern branch of the Great Silk Road passed through the Alanian lands in the North Caucasus: the Alans controlled virtually all the practicable passes into Transcaucasia and to the Black sea ports. Thus, the emergence and location of big settlements were prompted throughout Alanian history not only by internal socio-economic and geographical factors but also by the need to control the areas where the trade routes passed.

The fact is that Alanian studies do not yet have proper archaeological backing, even if it is true that numerous Alanian cemeteries (*e.g.* Baital Chapkan, Klin-Yar, Mokraya Balka, Zmeiskaya, Gilyach, etc.), all of them characterized by original burial customs and rich grave goods, have been investigated thoroughly. On the basis of these sites the chronological framework for the period in question was established for the North Caucasus. At the same time, Alanian settlements have been excavated only fractionally and Zilgi became the first habitation site to be investigated archaeologically on a regular basis. For six years, large-scale field-work on this site has been carried out under the direction of the present author (1985-1990). It was only to be expected that the analysis of the finds yielded by these excavations would lead to a substantial modification of both the chronology of the early medieval North Caucasus and of our notions concerning the structure of the Alanian society and its economy. The new data also enable us to tackle the yet unsolved problem of the emergence and evolution of the proto-urban centres in the North Caucasus.

The investigation of the Zilgi site allows us to distinguish a number of characteristic traits of the urbanization process taking into account geographical, socio-political and cultural factors. Since the finds have not yet been fully published and the monument remains virtually unknown to scholars, it is worth while to describe the complex briefly. The site is located on the northern outskirts of the Ossetian village of Zilgi in the Pravoberezhnyi district of Northern Ossetia near the Vladikavkaz-Nalchik highway (fig. 1) on the old original bank of the Kam-bilevka river, an affluent of the Terek. There can be

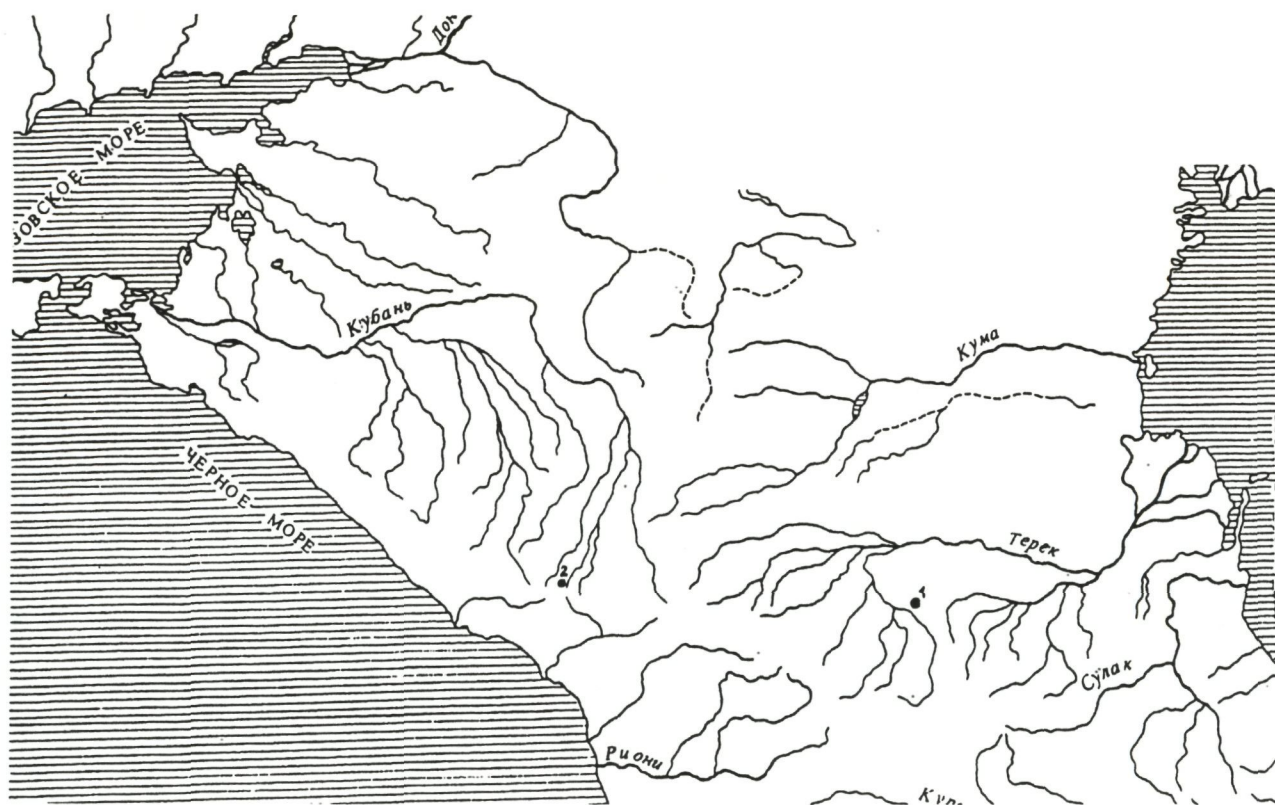


Fig. 1. - North Caucasus plan. 1: Zilgi; 2: Kjafar.

no doubt that in Antiquity the site was washed by the river. The overall area of the site amounts to 1.5 square kilometres. Like many other famous city, it lies on seven hills forming a particular pattern in plan: the Citadel (mound 1) was encircled with three deep ditches and three semi-circular habitable mounds (fig. 2). To the South-East, the habitation site adjoins a large barrow cemetery. Large-scale excavations conducted for several years enabled us to trace the likely sequence of the settlement and fortification formation: the foundation of the Citadel – or at least of its central part – was first built on a clay-soil plateau on a riverine promontory. The foundation was a platform consisting of adobe blocks. Next, the ditches – at least 6 m deep and 15 m wide – were dug successively into the virgin clay. Simultaneously, the slopes of these ditches were escarped and reinforced. As a result, the settlement assumed the shape of an elevated Citadel surrounded by three “rings” of habitation separated by deep ditches. Along their upper perimeter, the habitation mounds or rings were encircled with mud-brick walls. Judging from its outlook including a fortified citadel on a precipitous riverine promontory, the system of artificial fortifications and a multi-partite pattern, the site is similar to a number of habitation sites in the Kuma, Terek and Sunzha river valleys. Many scholars tend to date the emergence of those “earthwork” habitation sites to the post-Hun epoch, *i.e.* to the latter half of the 1st mil-

lenium A.D. So did the first investigators with respect to Zilgi. The dating was based partly on certain pottery forms, yet first and foremost on the fairly complicated and well-developed historical topography of the site, since there exists a deep-rooted prejudice against the notion of an early formation of complex town-planning patterns. Our excavations at Zilgi enable us to hold that nearly all the fortifications were built practically simultaneously and functioned during the main period of the history of the site, which we feel should be dated not to the latter half of the 1st millennium A.D. but to the 2nd-4th centuries A.D. This evidence requires a drastic revision of general views concerning the stages of urbanization of the area in question and of town-planning factors which have influenced the process. Without going into detail, it may be emphasized that our assessment of the chronology of the site is based on well-stratified and securely dated finds. The latter include first of all light-coloured amphorae dated to the late half of the 2nd to early half of the 3rd century A.D., fibulae of a certain type, the imported Transcaucasian pottery and the late Roman glass (fig. 3). Thus, the settlement under investigation is some 500 years older than was believed previously. The fact brought about new issues and put the site itself in a totally different historical context.

Medieval Zilgi was characterized by a way of life which was unusually intensive for the given period

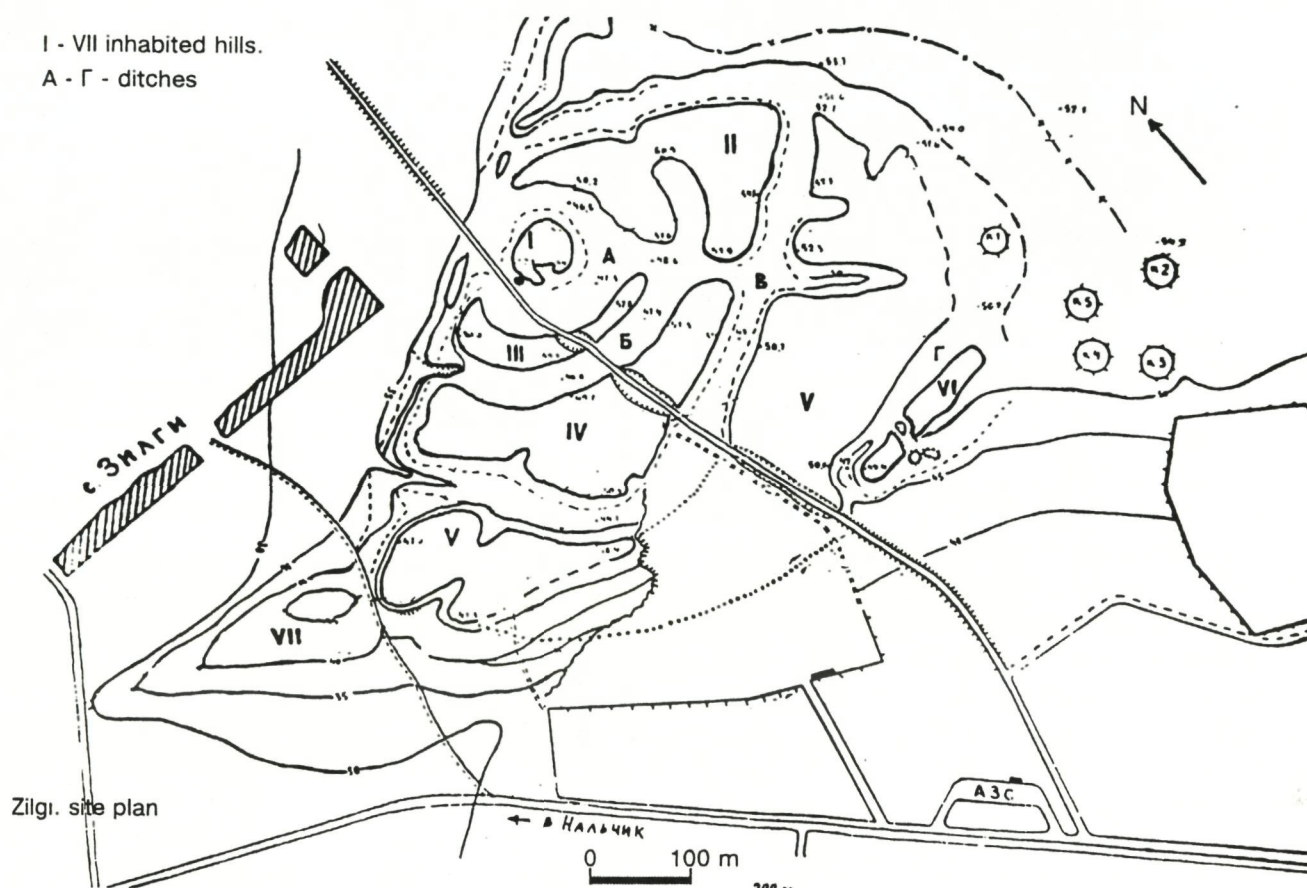


Fig. 2. - Zigli, site plan.

and area. This includes the high density of population and substantial occupation deposits ranging from 2 to 5 metres as well as evidence for an obvious craft specialisation, since the inhabitants of the settlement produced huge quantities of pottery clearly superfluous for mere everyday needs.

As to the stages of urbanization and town-planning factors, the geographical aspect should be stressed. Together with similar sites, Zigli, situated at the junction of the steppes and the foothills, at the very beginning of the Georgian Military Road (fig. 1) blocked the passage to the most easily accessible mountain passes such as the Daryal gorge. Strategically, the site was very well placed both for military purposes and with regard to the control over the caravan routes. Moreover, it lay in the area of *immediate contacts between the lowland farmers and the steppe cattle-breeders*.

Yet another important issue can be raised in connection with the new dating of the site. Written sources mention well-developed fortifications of Iranian-speaking tribes of the North Caucasus on the eve of the Christian era. Thus, Tacitus (*Annales* XII-XIII) narrates that in the 1st century B.C. the Bosphoran king Mithridates, pursued by the Romans, fled to the Siraces while the Romans sided with the Aorses (both tribes later joined the Sarmato-Alanian tribal

union). The tactics elaborated by the Romans and their allies are worth noting with regard to the town-planning and fortification: it was agreed that the king of the Aorses should conduct cavalry operations and that the Romans should assume responsibility for the town sieges. It was by no means a mere figure of speech, since the Roman army, well-equipped with offensive engines, besieged (sic!) the town of Usupa, situated on a mound and encircled with walls and ditches, instead of taking it by storm. Though – according to Tacitus – the walls of Usupa were composed not of stone but of wattle-fences and earthworks, they were sufficiently solid since a regular siege proved necessary to get over them. The town described by Tacitus is similar to our site with its wattle-and-daub structures. Thus, Zigli and other similar sites emerged when urbanization was already under way and when settlements displaying at least some of the traits pertaining to towns and cities already existed. Yet Zigli was no city in the true sense of the word and even the term “proto-city” should not be applied to it without reserve, since the term implies such a *stage* of the urbanization that ultimately led to the formation of cities. What we are confronted with is the phenomenon of a *proto-city* which never became an actual city.

Zilgi emerged as a proto-city; it never was merely a habitation settlement. Its genesis was due to the following interacting factors:

- 1) the local evolution, which created the necessary conditions for the formation of urban elements, *i.e.* a) a growing demand for productions of handicrafts in the steppes; b) the further development of the social structure of the lowland population (in connection with the social evolution and the formation of kinship networks among the Sarmato-Alans, one can quote Movses Khorenatsi's account of the events of the 2nd century A.D. when the Armenian king Artashes married the Alanian princess Satenik); and c) the emergence of fortified strongholds as a result of these developments;
- 2) a strong external impetus probably originating from Central Asia.

It seems likely that the general stirring up of the steppes in the early 1st millennium A.D. also had something to do with above-mentioned processes.

Zilgi as a proto-city is characterized by the rural outlook of every single household, *i.e.* the existence of subsidiary agricultural handicrafts and agricultural implements, and the lack of specific urban finds, *e.g.* inscriptions and coins. So far, no monumental structures have been encountered, though the fact can be accounted for by the poor conservation of the building remains. Yet the rural everyday life went together with a high population density, complex labour-consuming fortifications and well-developed trading relations. The site shows traces of nearly all urban crafts including copper-casting. Dozens of complex specialized forms of vessels and a high percentage of stereotyped and imported pottery are indicative of urban everyday life (Fig. 4).

With regard to the social structure the existence of the sedentary population of the proto-city's hinterland should be mentioned. Moreover, as stated above, the site is connected with an enormous catacomb cemetery with a fair number of rich grave goods.

The trading functions of the proto-city and the production of high quality stereotyped pottery are of primary importance. The pottery was destined not only to the rural neighbourhood of the proto-city itself but first and foremost for the steppes of Ciscaucasia from the Volga to the Don. As the comparative analysis of pottery from Sarmatian burials and settlements of the period has shown, Zilgi was one of the pottery production centres of the region during the late Sarmatian epoch. The trade relations of Zilgi are characterized by the presence of amphorae, late Roman glass and imported Georgian pottery. Objects such as lid-dishes with digital imprints and double-handled vessels are indicative of contacts with Central Asia.

Thus, there is every reason to believe that we are dealing with a specific form of proto-city, which emerged at the borderline between the foothill farmers and the land-tilling and cattle-breeding late Sarmatians of the steppes. The proto-city owed its prosperity to the economic structure formed in the steppes during the late Sarmatian epoch and did not outlive it. The mechanism of the formation of such proto-cities and their interaction with the Sarmatian steppes can be accounted for by the migration of both the nomads and the mass material culture of the agricultural population adjoining the steppes along Eurasian "passageway". The newly arrived population brought with them the tradition of the division of labour between the steppes and agricultural communities. This gave an impetus to the formation of proto-cities, which local culture could not achieve on its own. I repeat that such proto-cities as Zilgi were fundamentally connected with the steppe cultures and did not outlive them. We know by now at least ten large "earthwork" multi-partite sites with thick layers of occupation deposits dated to the period in question in Central Ciscaucasia, among them Andrei-aul, Alkhan-kala, the Lower Dzhulat and Brut. They are situated within the area encompassing the foothills and lowlands of eastern Kabarda-Balkaria, Northern Ossetia, Chechnya, Ingushetia and western Dagestan. It can be assumed that a considerable number of habitation sites of the same type in a restricted area belonged to one and the same ethnic group and could dominate a given agricultural territory and trading routes running across it. The majority of them had ceased to exist by the mid-1st millennium A.D. for reasons mentioned earlier reasons and there was no evolution from proto-cities to cities proper. The later Alanian fortress towns emerging in the 8th-9th centuries A.D. probably go back to small strongholds situated as a rule on plateaux along the river valleys. These fortress towns had taken shape as early as the 6th and 7th centuries and consisted of some 20-30 stone structures encompassed by a stone wall as can be seen at Ukazatel, Klin-Yar, Gornoye Ekho, etc. Probably by the 6th century A.D. two major Alan groupings had appeared. The eastern Alans were settled around the Darial Pass, which led into Kartli, a country dependent on the Persians. In their politics they gravitated to Iran. The western group lived on the upper reaches of the Kuban, close to Lazica and Abkhazia, which were under Byzantine control. Therefore Western Alania also entered the sphere of Byzantine influence, which was prominent both in the spiritual and material culture of the Alans. After the fall of the Khazar Chaganate, Byzantine influence in the North Caucasus evolved, acquiring new qualities attested by the mass conversion of the

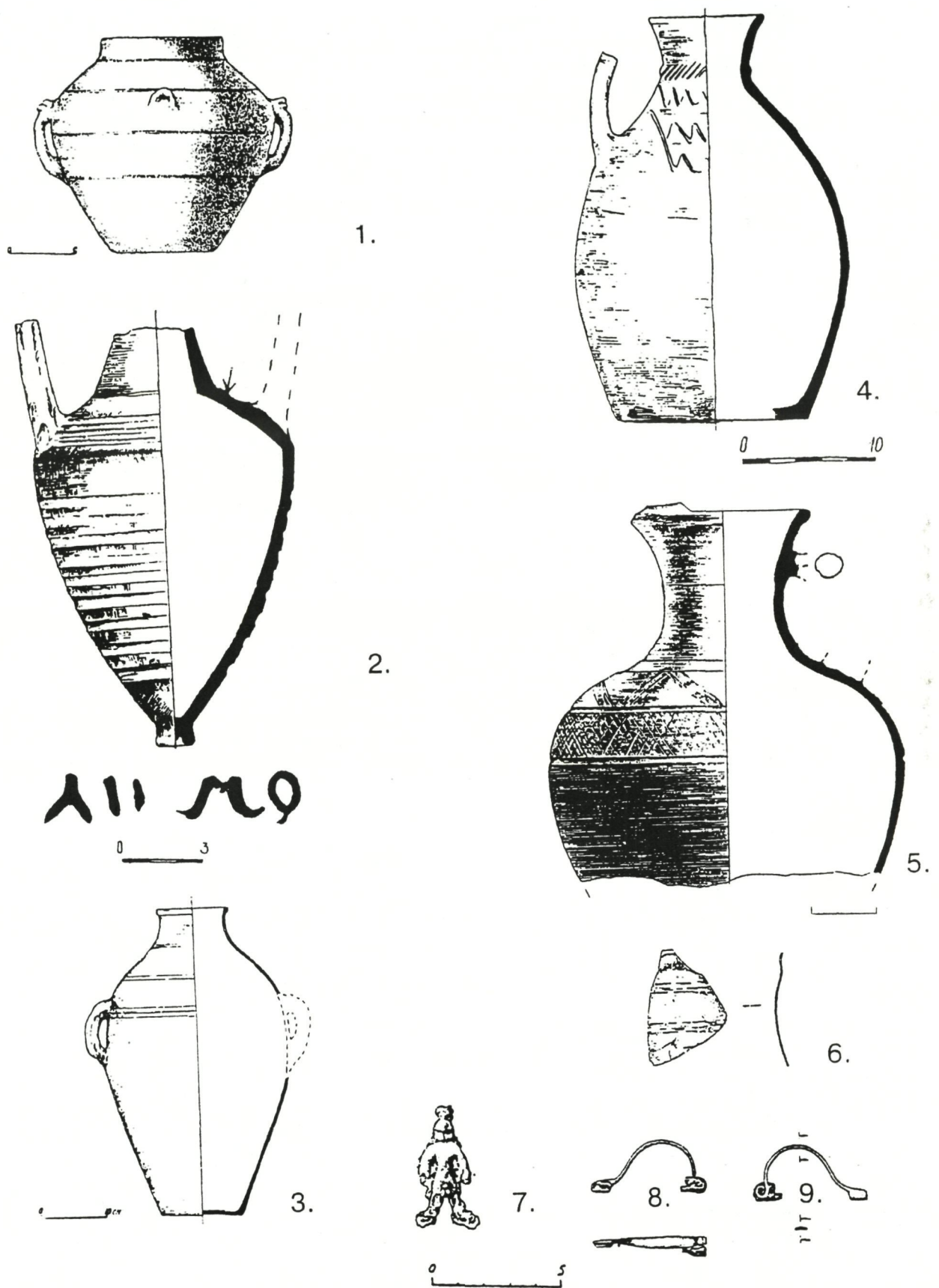


Fig. 3. - Zilgi: 1-5 pottery, 6 glass vessels, 7 bronze amulet, 8-9 bronze fibules.

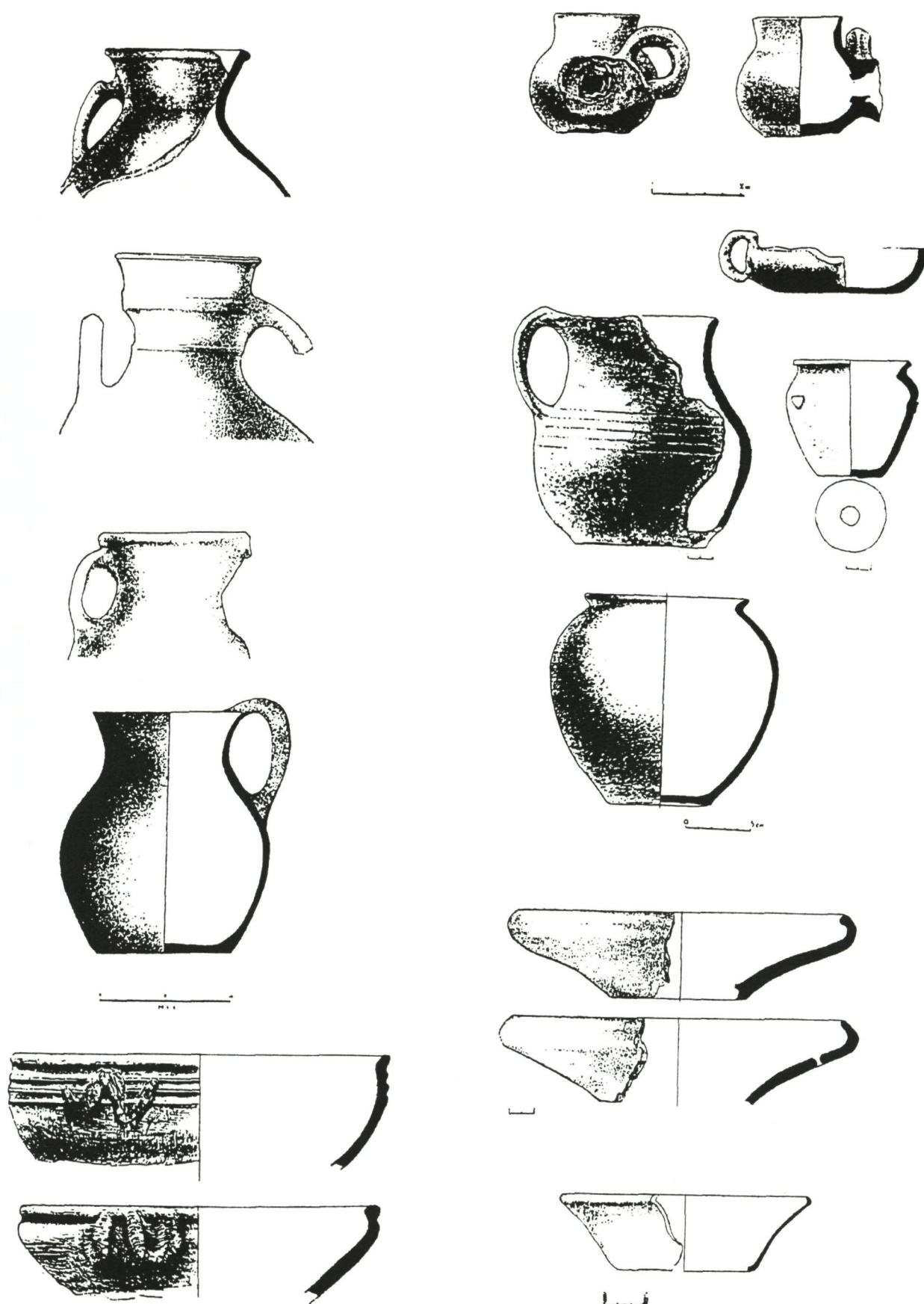


Fig. 4. - Zigli pottery.

Alans to Christianity, the spread of Byzantine building traditions and the erection of monumental temple complexes in the 10th-13th centuries A.D. The said influence should show itself in town-planning patterns as well.

By the 10th c. several dozens of strongholds had emerged in Western Alania. Their dimensions and structure were such that one can consider them to be fortress towns. Nearly all of them had complex and well thought-out fortifications which were adapted to the environment. Their inner space was also well organized. These towns almost invariably had their own agricultural neighbourhood situated in the river valley while the town itself occupied a plateau overlooking the river. These towns could hardly emerge as a result of a direct Byzantine influence; as stated above, they took up the local tradition. Yet one can notice a Byzantine "impetus" and certain building traditions, notably in fortifications and cult structures. Among those fortress towns of the 10th-13th centuries, the Kiafar township is the largest (fig. 5).

Kiafar lies on a narrow ridge covered with thick beech forest (which has made archaeological work very difficult). It overlooks the junction of two rivers, the Kiafar and the Krivaia. Four years' work has resulted in our producing a large-scale plan of the city which maps all objects visible on the surface. We have investigated a total of some two hundred such objects. The length of the town from north to south is almost two kilometres. At some points the width reaches 200 metres. Nevertheless, we can only estimate the overall area of the town approximately, since an extensive lower part of the town is located on the banks of the river Kiafar and this area was not fortified. At the turn of the 19th and 20th centuries, all stone structures on the river bank part were dismantled to build nearby Cossack stations. Therefore we could only have explored the surviving part of the township. Even a cursory glance at the plan of the town shows its strikingly complex structure. The town has a lower and an upper part. If we include the river-bank part, which has disappeared, it was a tripartite city. There are almost no habitations in the lower part, but it is surrounded by a defensive wall (which we call the first lower defensive wall) which runs parallel to the river Krivaia. The lower part of the town does, however, have several complexes which I am inclined to interpret as religious (see also below). A road leads from the entrance to the lower part, on the river Kiafar side, towards the upper town (this road dates from Antiquity). Immediately next to the upper town and to the right of the road, there is a rocky outcrop which we have, for good reasons, decided to call the "Shrine". The "Shrine" is a rocky outcrop with sides too steep to

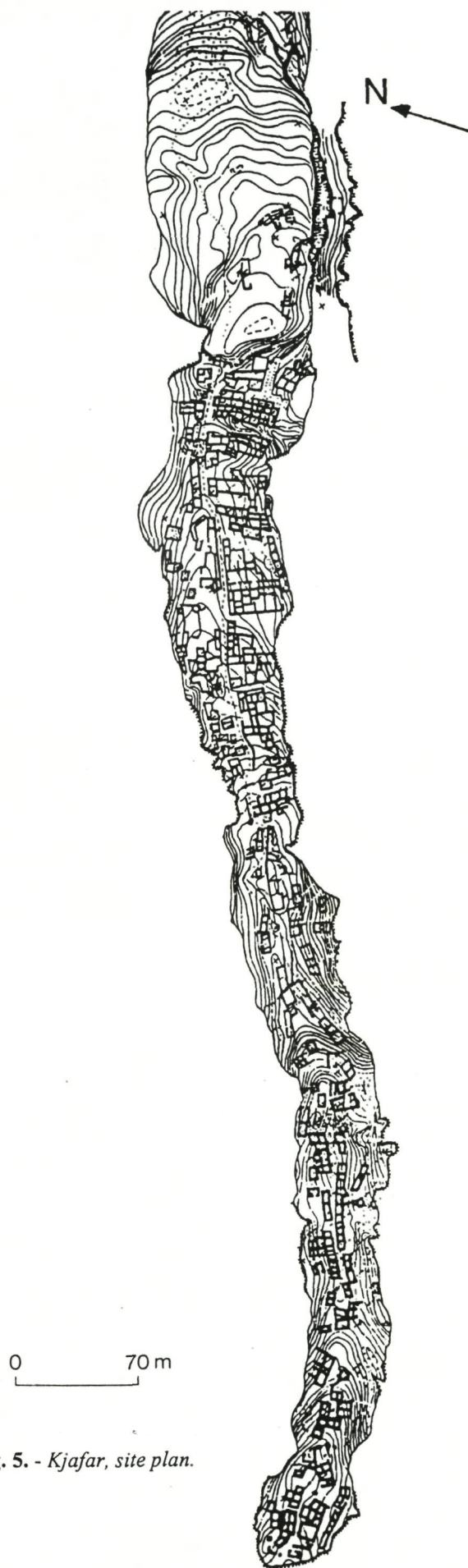


Fig. 5. - *Kjafar, site plan.*

allow access. It is 10 metres high and has a flat top. Fifteen steps cut into the rock lead to this flat landing. We discovered and examined a structure there: it may have been a small single-apsed church or a chapel. This is suggested by the plan of the building, its orientation, the thickness of the walls (which are more solid than those of living accommodations), the remains of a floor made of stone slabs, and the construction techniques (which are also different from the techniques used in building living quarters and defensive structures). If this was a Christian church, then its proximity to sacrificial stones is all the more remarkable. These stones are placed in a half circle on the edge of the shrine, right by the entrance into the church. The stones, the church and the area between them are certainly parts of a single complex. Why do we think these stones to be sacrificial in nature? They are slabs of fairly large dimensions, artificially worked with an absolutely even surface. All of them stand on "feet" made of small slabs of sandstone. They are all placed at a slight slope. There are petroglyph signs, in the form of the so-called "Babylon" and tamgas of geometric form carved on a central slab which is right opposite the entrance to the building; next to the signs is a small hollow, perfectly hemispherical in shape. Externally, these slabs are absolutely identical to those on which the local inhabitants – Karachai Turks – used to slaughter sheep until very recent times. Thus, we have every reason to consider these slabs to be sacrificial ones. How do we explain the presence of obviously pagan cults right next to Christian rites (assuming the building really is a church)? The explanation is quite simple. The Alans accepted only a veneer of Christianity. On the whole, they remained pagans at heart. Such a religious dualism is typical of the inhabitants of the Caucasus and is still encountered today. Other stones with petroglyphs and hollows were also found on the "Shrine". It is clear that pagan religious rituals took place here.

The upper part of the site is also surrounded by a wall that follows the contours of the river Krivaia, the reason being that both the lower and upper parts are virtually inaccessible from the slope on the river Kiafar side. The upper defensive wall is far more substantial than the lower one and in a better state of preservation. Its thickness reaches two to two and a half metres and at some points it still reaches a height of three metres. The extant length of this wall is about three hundred metres. The wall is made of worked sandstone slabs, double-faced with rubble in-filling. Judging by the remains of the gaps, the wall had a system of loop-holes or of defensive merlons. The wall follows the relief of the rocky ridge, blocking and protecting the weaker points of the area to be

defended. Thus the upper part of the site was defended by a well-planned system of fortifications.

The upper town is divided into several parts, depending on the relief, since the ridge rises in steps from south to north. The relief boundaries pretty well coincide with socially relevant areas and features and with the economic and productive zones. All parts of the town inter-communicate by gates arranged along virtually the same axis in a kind of enfilade.

The best defended and highest part of the upper town is the southern tip of the ridge, with a horizontal area and inaccessible sides. It is here that remains of quite big, multi-chambered buildings were found: they could be interpreted as a palace complex. This hypothesis is backed up by the position occupied by this complex, by the presence of the remains of two cisterns (wells) and by the nearby remains of a long barracks-like building. Here, the ruler's guards may have been housed. Nearby stood a building of unusual configuration with semi-circular additions which may be interpreted as being of a religious nature. Moreover, this area is separated from the rest of the town by a narrow isthmus and it is flanked by natural rock, which adds to the defensive features. Further on, one finds a long, narrow section of the town; along the axis of the ridge, this section is sharply divided into two slopes, one leading to the Krivaia, the other to the Kiafar. Along this axis, the central street ran along the whole length of the town.

This section is heavily built with both single-room and multi-chambered buildings of various types. Some buildings have a fairly complex plan and are well preserved. There are traces of some buildings with low ground floors, cut into the rock. These are most likely sheds or cattle stalls. Some buildings were cut off from the main street by a blank wall with towers and were thus fortified internally. In the same area, a concentration of several long buildings occurred, each room of which had a separate exit. They probably are barracks. I presume that this was the part of the town where the feudal elite and its armed bands lived.

Further we find a lower and less defended area of the town, where the same two-part axial division occurs. In this area we can trace a clear, consistent distinction. On the river Krivaia side enormous houses were built next to each other, with a very complex plan including numerous outbuildings, partitions and internal courtyards. We found about ten houses of this type. On the river Kiafar side of this area, no such complex buildings were found, for here the predominant houses were separate, one-, two- or three-room buildings of a relatively simple plan. Some were built like towers. I suspect that in the larger houses with a great number of outbuildings a single

large and constantly expanding family lived. After a fashion, these buildings were extended-family houses with their own economy; presumably, they were built on the river Krivaia side because this was the safer side of the town. Attacks were most likely to come from the river Kiafar side.

Finally the last part of the upper town clearly had a communal character. It is a gently rising, large and even plateau on which virtually not a single remnant of any structure has been found, except for four very well-preserved buildings. Possibly, these buildings had some administrative purpose. Perhaps this was the communal centre of the town, or perhaps the population came up here from the undefended riverside part of the town, to shelter behind the upper fortress wall in times of danger.

This is the structure of the densely populated town. One interesting aspect should be noted: there are many pagan cult structures in the lower part of the town which are most likely to be connected with hunters' magic. These include Hunters' stones and a Sacrificial stone near the entrance to the town.

Next to the town we discovered a royal necropolis, which not surprisingly was robbed in Antiquity. But even today the tomb slabs with rich relief ornamentation survive. This is the place of origin of the famous royal tomb now in Stavropol museum. This tomb belonged to one of the rulers. In the town we found several slabs from dismantled tombs with similar reliefs.

As for dating the monument, the bulk of the pottery recovered through excavations dates from the 10th and 11th centuries. Owing to the poor state of conservation of occupation deposits and the small dimensions of the excavations, we have not yet found any coins; nevertheless, such finds are likely to turn up during further fieldwork. Iconographic and stylistic features of relief ornaments also point to the 11th century.

When finishing drawing up a plan of the city, we did some very general preliminary demographic calculations. The overall area of the site, not including the lower riverside part, has a surface of 98,162 square metres. Of this area, the upper part – the ridge – takes up 61,512 square metres, so the lower part has a surface 36,650 square metres. There are virtually no inhabited structures in the lower part of the site (except for some buildings near the "Shrine", the function of which still requires an explanation). On the ridge, we have located and mapped 114 buildings. Using a fairly simple (but very laborious) calculation formula, we estimated the area of habitable space to be 7,125 square metres. Then, using as a basis the minimum and maximum norms of space per person (from 4 to 10 square metres), it

may be conjectured that the population of Kiafar amounted to something between 742 and 1781 persons. For its time, Kiafar was a sizeable town.

To which one of the known Alan rulers of the 11th century could this fortress town have belonged? And whose royal tomb is it? Prominent specialists on the Caucasus have suggested that the Alans reached their greatest power and their prime under the rule of Durgulel the Great. According to Georgian sources, his reign coincided with that of the Georgian King Bagrat IV (1027-1072). Durgulel is mentioned several times in *The Conversion of Georgia* as "the Great King of the Ovses Dorgolel". Durgulel the Great was also closely linked to the Byzantine imperial court. Understandably, it is Durgulel the Great who is mentioned in many Byzantine sources of the time as the "Ruler of Alania". Thus we have every reason to suppose that the largest town in western Alania, situated not far from the Alan Eparchy in the Lower Arkhyz, with such a complex structure and system of fortifications was the residence of Durgulel the Great.

The town is very likely to have been abandoned by its inhabitants in the 12th or 13th centuries because of the political situation – the general decline of the Alanian state and the catastrophe that struck the whole North Caucasus: the Tartar-Mongol invasion.

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From city to fortress: town life in post Roman Dacia?

Introduction

One of the most challenging subjects in urban studies of the early medieval period is what happened to the towns and cities of provinces abandoned by Rome. This paper examines the evidence from the cities of post Roman Dacia north of the Danube. Whilst focusing on the cities themselves an attempt is made to assess the continuing influence of the Roman empire as well as the impact of migrating tribes.

Archaeological background

Rome withdrew from Dacia, removing troops and civilians from the majority of the province, in the last quarter of the 3rd century AD, but it retained the

bridgehead sites on the north bank of the Danube at Dierna (Orsova), Drobeta (Turnu Severin) and Sucidava (Celeui). In the interior, archaeological evidence suggests the continued presence of a rural population, characterised as the Sintana de Mures-Chernahov culture. The prevailing opinion in print is that the cities continued to function as market places until the Hunnic invasions of AD 442. In 1928 Parvan outlined what has become the preferred model of city survival, in which they became the nodal points in a trade network articulated by the Romano-Dacian population. In 1945 Constantine Daicoviciu, although only publishing in summary form, supported the case for survival based on his excavations at Sarmizegetusa. Later still in 1966, in what has become the orthodox standard on post Roman Dacia, Protase argued that there was sufficient evidence to re-affirm the argument for continued occupation of the cities,

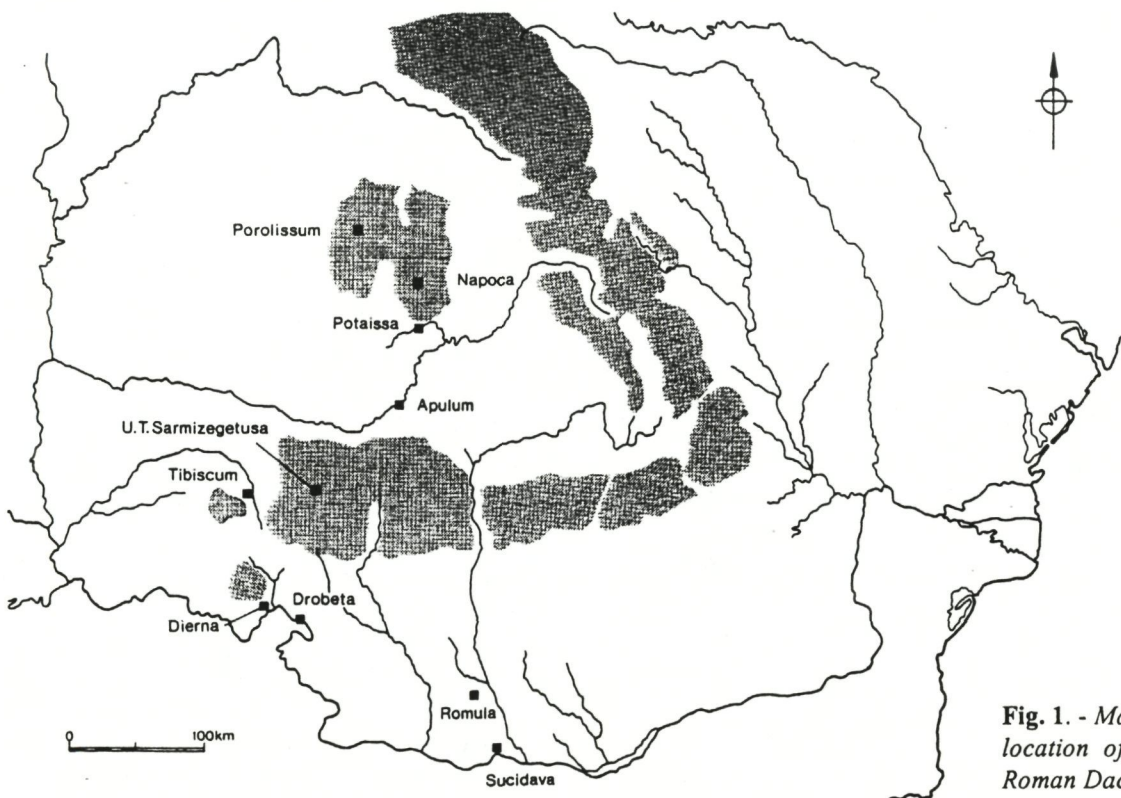


Fig. 1. - Map showing the location of the cities of Roman Dacia.

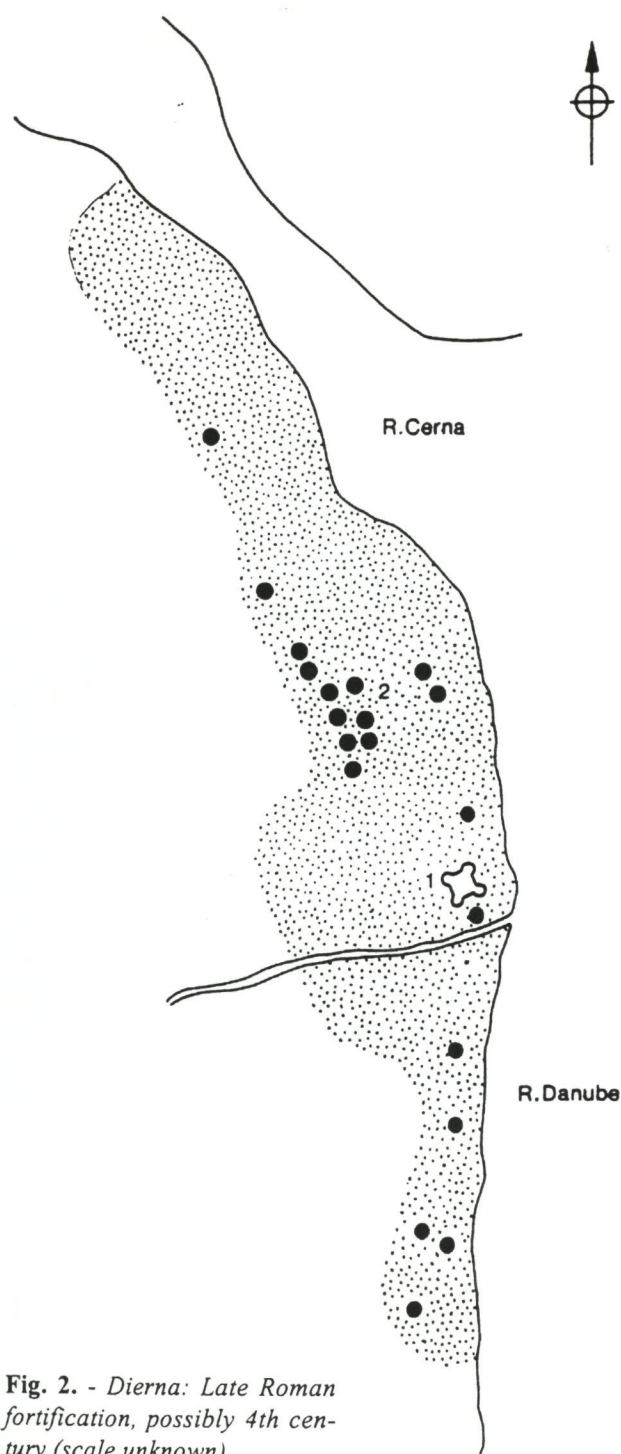


Fig. 2. - Dierna: Late Roman fortification, possibly 4th century (scale unknown).

albeit in a reduced state, until the invasion of the Huns (see also Horedt 1941, 1958a & b, 1982). It was these towns, all with the rank of at least *municipium* in the Roman province, where E A Thompson believed the Goths learnt how to use coin as a trading medium (Thompson 1966). In 1993 Protase re-stated his case, at a Swiss-Romanian colloquium in Cluj, listing evidence from Ulpia Traiana Sarmizegetusa, Apulum, Napoca, Porolissum, Potaissa and Tibiscum. Despite the confidence of many of these surveys the evidence for continued occupation is frag-

mentary, whilst destruction by the Huns is deduced entirely from coins series which terminate in the mid 5th century.

Topography and Roman Dacia

The Roman province of Dacia occupied what is today the Banat, Transylvania, and parts of Wallachia and Oltenia. The western border of the province probably followed the Tisza river from its confluence with the Danube at Acuminum (mod Slankamen), along the river Mures as far as Micia (Vetel), from where it strikes north in a broad arc of auxiliary forts towards Porolissum (Moigrad). Eastwards from Porolissum the frontier follows the Carpathian crescent until reaching the headwaters of the Olt. From here the limes run through the hinterland of the Olt to the Danube close to Sucidava. The eastern part of the province is dominated by the wide sweep of the Carpathians on whose slopes many of the auxiliary forts, which define the limes, are situated. In the west the topography is gentler and the central area occupies the Tirnava Platform, a broad, agriculturally rich upland zone. This plain is protected on its western side by the Samoseni Hills. In the southwestern corner, the modern Banat, the landscape is flat and open. The Carpathian crescent therefore serves as a barrier to movements from both east to west and north to south, whilst the funnelling effect of the Carpathian passes ensured that the cities of the interior, Tibiscum, Sarmizegetusa, Apulum, Napoca and Porolissum, were all founded and prospered on the main military roads into the province. Further south the cities of Dierna and Drobeta and later Sucidava were established at crossing points on the Danube.

With the exception of the *colonia* Ulpia Traiana Sarmizegetusa and possibly Napoca the cities of Dacia were garrison towns which grew up outside the gates of auxiliary or legionary forts (Fig. 1). None of the Roman cities, with the possible exception of Sucidava, were established in locations occupied by earlier Dacian centres. In the Roman period they provided the basis for the provincial organisation which for nearly two hundred years comprised three Dacian provinces. All the cities achieved the rank of *municipium* and many became *colonia*. In addition Drobeta, Dierna, Sucidava and Romula, the latter on the river Olt, were portorium or customs posts at points of entry to the province.

For the cities of the interior, the evacuation of Dacia meant the withdrawal of garrisons, the removal of civil functions. Even if this took place in two stages (Okamura 1996), military withdrawal under Gallienus (253-268) and the removal of all useful

civilians to the new provincial area of Dacia Ripensis under Aurelian (270-275), those who remained will have been faced not only with the renegotiation of social and power structures but the establishment of the means and framework of production. There can be little doubt that evacuation led to significant urban depopulation.

Rome never returned to Transylvania but it did retain the Danube valley as part of the new province of Dacia Ripensis. In this area in the last quarter of the 3rd century the Danubian cities of Dierna, Drobeta and Sucidava were transformed from riverside garrison towns on the provincial border between Moesia and Dacia to bridgehead towns on the edge of the empire. At Dierna (Fig. 2) evidence for continued occupation comprises a coin series from Aurelian to Arcadius (395-408), graves (Benea & Schiopu 1974) and stamped tile (Tudor 1968a, 22ff) suggesting Dierna remained in Roman occupation until it was destroyed by the Huns. The town was briefly 'restored' under Justinian (527-565) (Procopius *De Aedif.*, IV 6,5). At Drobeta (Fig. 3) the auxiliary fort was refurbished under Constantine (306-337) and the town remained occupied until at least the 7th century when it was probably destroyed by the Avars. Further east still Constantine may have built the second of two stone bridges across the Danube at Sucidava (Thompson 1956, 374ff). Located on the north bank it lay opposite Oescus (Gigen), and was probably occupied from the early 2nd century. Under Constantine a citadel (Tudor 1965, Fig. 16) was constructed to command the Danube; the site was identified in the *Notitia Dignitatum* (XLII, 16 & 24) but was sacked by the Huns. It was restored under Justinian (Procopius *De Aedif.*, IV 6, 34) before being destroyed in AD 599-600 by the Avars. It was not until the 9th century when 'protobulgarian' ceramics appear in the archaeological record that Celeui was re-occupied.

North of the Danube the situation was more complex. A 4th century milestone from the road to Romula (Ann. Ep. 1939 no. 19, Tudor 1940), suggests Rome re-occupied some territory in Oltenia, including Romula, during the 4th century, possibly in or around AD 328 (Thompson 1956, 374). The re-occupation of Romula after a gap of nearly fifty years is a significant event, yet interpretation of the structural remains has never satisfactorily taken account of this episode. The city (Fig. 4) was first established as an auxiliary fort (Vladescu 1977) around which a vicus developed during the 2nd century AD. The fort was reconstructed in brick before being evacuated probably at the end of the 2nd century. It was not until the campaigns of Philip I, that Romulas' walls were erected when, it seems likely, the city provided the emperors campaign headquarters. Yet on the south side

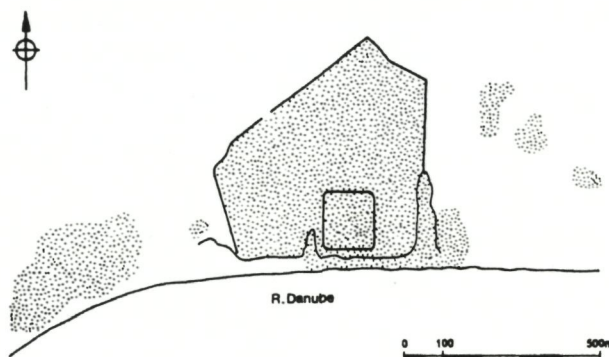


Fig. 3. - Drobeta.

of the town the wall circuit was apparently divided by a cross wall isolating a D-shaped area within a meander of the Resca brook. Tudor (Tudor 1968b) had suggested this may have separated Dacians from Roman citizens but the re-occupation of Constantine suggests an alternative context for the construction of a reduced wall circuit. Further structural and artefactual evidence is sparse, Cezar Boliac had conducted extensive excavations in 1869 throughout the town and established two major coin sequences. The first from Severus (193-211) to Aurelian and the second from Constantine to Honorius (395-423). In

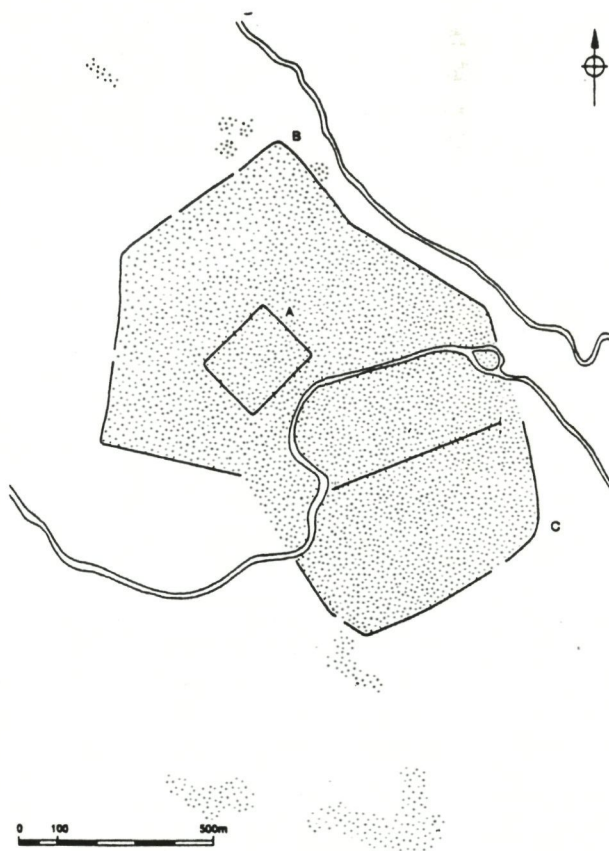


Fig. 4. - Romula: A: 2nd & 3rd century auxiliary fort; B: wall circuit under Philip I; C: possible late Roman enceinte.

addition there are chance finds of bronze coin from Zeno (474-491) to Maurice (582-602) which probably extend the period of occupation as late as the 7th century. The majority of coins in the southern and eastern areas were minted in the east and Duncan has suggested this indicates only tenuous contact was maintained with Rome into the 6th century. Moreover because the majority of coins originated in the east they were probably not brought by mercenaries returning from imperial service, nor represent tribute to the Goths, both of which would have stemmed from the western empire; instead the coins are the result of trade with the east (Duncan 1993, 113).

The cities of the interior

Sarmizegetusa

The evidence of post Roman activity from the cities of the interior, in contrast to those further south, is entirely archaeological. From Sarmizegetusa (Fig. 5) there is a wooden building erected east of the basilica EM21 above the remains of a Roman stone structure (Alicu, Pop & Cocis 1993, pl. II) aligned along the main Apulum-Tibiscum road. Inside the city walls at Grohotea Torneasca (Daicoviciu *et al.* 1983), between the Procurators palace (building 003) and a granary (building 001) is a series of drainage gullies, an 11 m long stretch of dry stone walling which uses spoilia, including altars dedicated in the 3rd century and two rectangular buildings (buildings 004 & 005) of mortared stone. The latter were founded within demolition material derived from the granary and the palace and both had herringbone



Fig. 5. - Colonia Ulpia Traiana Augusta Dacica Sarmizegetusa: 1: buildings 004, 005 and dry stone wall (Daicoviciu *et al.* 1983); 2: structures in the forum; 3: defended amphitheatre; 4: EM23; 5: timber structure east of EM21; 6-7: suburban burials; 8: coin hoard found in the amphitheatre.

coursed foundations. Within the forum (Daicoviciu 1932-8), once identified as the palace of the imperial cult (cf. Etienne *et al.* 1990), several channels, late walls and hearths were recovered. Outside the city walls to the north, the gates of the amphitheatre were blocked to create a fortress (Jung 1893; Gabor 1893-1896) and, on the east side of the old *colonia*, a pottery kiln of Roman style was excavated through the collapsed remains of an earlier ashlar structure (EM 23). It was at this building that the early walls were re-used as the basis of a later structure comprising several dry stone walls and an oven (Dawson 1993, Fig. 4). In addition there are several isolated late burials around the city, one within a suburban villa (Daicoviciu 1924, 236-8, Fig. 2).

The dating evidence for the structures is varied. Stratigraphically they all post date Roman buildings of the mid 3rd century. At Grohotea Torneasca the structures have been assigned to the 4th or 5th centuries because of the discovery of a ChiRho inscribed pot base amongst the demolition material in which the buildings were located (Daicoviciu 1981). At EM23 a lamp found in the fill of the kiln dates to the 4th or 5th century by analogy with Italian piriform types. The date when the amphitheatre was blocked is even less secure. In the past it has been associated with a small 4th century bronze hoard, containing coins from Valens to Valentinian (Jung 1893), despite the location of the hoard amongst the seating some distance away from the gateways.

In addition to the structures there are isolated finds from the city site. Several lamps including one with a relief cross probably date to the 5th century whilst a 7th century brooch of unknown provenance is the only artefact from this century (Alicu *et al.* 1994, inv. 629, ff. 48). A small collection of five coins from Diocletian (284-305) to Valentinian (364-375), gathered in the area of Hateg, and often associated with Sarmizegetusa, however, must be discounted as evidence for activity in the city (Protase 1966, 168).

Apulum

There is structural evidence too at the garrison city of Apulum (Fig. 6), where a wooden structure was excavated within the area of the fortress, close to the present day orthodox cathedral (Protase 1993). Late graves are attested inside the *municipium* (Berciu 1949, 200; Mitrofan 1965, 99) including 56 in an area once thought to be the baths, but probably the governors palace, excavated by Cserni between 1902 and 1908 (Horedt 1958b, 49-70). The graves can be dated by the coins from the period Diocletian to Gratian (375-383) with one grave probably including a palaeochristian lamp. A second inhumation group,

(Protase 1974, nos. 111-114, 120) included graves, oriented east west, made of bricks and tiles including one with re-used spoilia.

There is also a range of individual artefacts including coins dating from the 4th and 5th centuries. Thirty six coins from Diocletian to Gratian were recovered by Adalbert Cserni during the 19th century (Protase 1966, 162) in the area of the cemetery. In the period 1957-1980 a further 4 coins from Maximian (286-308) to Theodosius (408-450) were recovered as chance finds from Partos and Platoul Romanilor (Pavel-Popa 1981). In addition to the coins are two artefacts with Christian associations: a buckle with a cross found in 1973 (Protase 1993); and two lamps decorated with Christian long crosses dating to the 4th century (Horedt 1982, Abb. 60, 2-4). The find-spot of the latter is uncertain as is the provenance of the crossbow brooches (inv. 1838), a conical faceted glass beaker and a disc brooch (inv. 1799) dating to the 4th or 5th centuries in Alba Iulia museum.

Napoca

At Napoca (Fig. 7), until the recent spate of rescue archaeology, there has been little investigation of the town centre. Nevertheless a small coin hoard containing seven issues of Tacitus, Probus and Carinus has been found (Preda 1975, 464). In the suburb of La Samoseni at La Gat, 2 km east of the centre of Cluj, was a silver coin of Iovian (Mitrofan 1965b, 666) and 25 coins dating from Aurelian (270-275) to Valentinian II (375-392) were found in an area of the cemetery south of the Roman city (Radu 1967; Winkler 1960). There is also a solidus of Theodosius (408-450). In addition to the coins several burials in the city have been dated to the 4th century. In the early 20th century Kovacs recorded the discovery of several graves re-using Roman sarcophagi (Hica-Cimpeanu 1977). At Str. 30 Decembrie a grave contained a ceramic vessel decorated with a wavy line motive 'Krausengef.,be' which Vlassa (1970) dated to the 4th century; at 1-5 Str. Plugarilor Wolski (1971) cautiously argued that the east-west orientation, poor quality of tile sarcophagi and the lack of grave goods was sufficiently close to Pannonian and Gallo-Belgic forms to assign the Cluj tombs to the 4th century. Lastly, and more convincingly, from 30 Str. Avram Iancu a pagan tombstone on which a monogrammatic cross had been inscribed indicates later re-use, probably in the 4th century (Daicoviciu C 1936; Vasiliev 1967). There is little structural evidence in Napoca however, with only two kilns sites known from Monastur west of the *municipium* (Hica 1974). Close to the museum of Transylvanian history and in Piata Libertatii are two recent rescue sites which appear to indicate the development of black soil horizons.

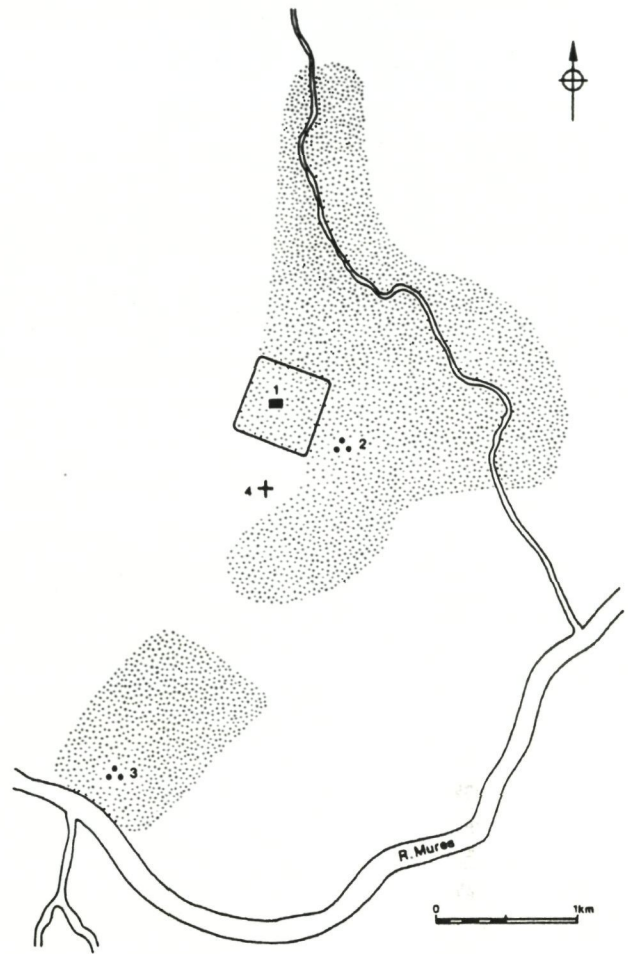


Fig. 6. - Apulum: 1: wooden structure next to cathedral; 2: coins found in the governors palace; 3: coins in Partos; 4: late Roman coins and graves in Platoul Romanilor.

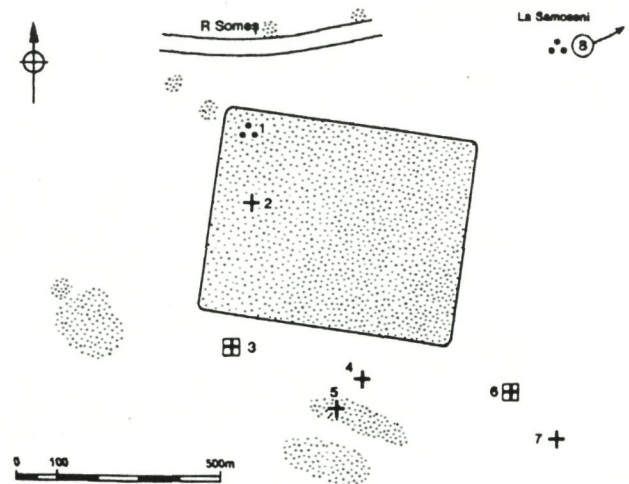


Fig. 7. - Napoca: 1: hoard of Tacitus, Probus and Carinus; 2: grave in Str. 30 Decembrie; 3: tombstone from str Avram Iancu; 4: re-used Roman sarcophagus (Hica-Cimpeanu 1977); 5: tombstone with monogrammatic cross; 6: late Roman finds (Horedt 1982, Abb. 24) and coins in cemetery south of the Roman city; 7: graves in str Plugarilor; 8: coins found in La Somesenii.



Fig. 8. - Potaissa: 1: late graves; 2: late coins in settlement area; 3-4: 5th century cemetery in barracks of earlier fortress.

Potaissa

At the garrison city of Potaissa (Fig. 8) late coins have been found in the settlement area to the south of the legionary fortress including a single coin of Justinian (Winkler & Hopartean 1973). In the most recent list 145 coins have been recorded: 120 from the period AD 284-363 and 25 from AD 363 - 411 (Barbulescu 1994, 176). There are further artefacts from Potaissa, including several plain lamps (Barbulescu

1994, Fig. 22: 3, 4, 5) which have been identified as late by analogy with similar forms circulating within the empire. These lamps were isolated finds. Equally isolated but from within the town are a 4th century silver crossbow brooch, a 5th century radiate headed brooch and a single Christian intaglio (Barbulescu 1994, Fig. 37: 6, 7).

Evidence of post Roman structures at Potaissa is limited and far from clear. Two tombs have been assigned to the post Roman period. A child burial accompanied by a miniature golden Herculean club cannot be more closely dated than to the period 4th to 7th centuries (Luca & Hopartean 1980) and a grave in the via Bardocz has been dated to the 4th by analogy with those from the Str. Plugarilor in Cluj (Barbulescu 1994, 178). These graves were outside the civilian town. In addition the increasing recognition of east-west oriented graves fashioned from tiles through out the empire in the 3rd century considerably undermines the ascription of a 4th century date to the graves from either Potaissa or Napoca. By the 5th century the evidence is clearer with the establishment of a small cemetery where graves were dug into the barracks area of the former fortress. The cemetery group was dated by the presence of a radiate headed brooch and a bone comb, possibly from the same period (Barbulescu 1994, Fig. 37: 8). It is not, however, until the period 8th to 9th century that an identifiable pottery tradition returned to Potaissa.

Porolisum

Like Potaissa, Porolisum (Fig. 9) was a garrison centre but it was located at the most northern extremity of the province. In common with the other towns there are graves which have been assigned a 4th century date. In 1914 17 inhumations, located at the roadside between Pomat and Citera in an area occupied by building OL5, were published by Gudea (1989, Fig. 49). Their tile construction and that they were cut through the remains of building OL5 in a variety of orientations indicated they are probably post Roman. More recently Gudea has noted that the graves were in area in which 4th century coins had been found (Gudea 1989, 342), but unfortunately 4th century coins in this area need be no more than coincidence.

Potentially one of the most significant (and contentious) claims is that the temple of Bel (Fig. 10) was transformed into a Christian basilica (Chirila *et al.* 1980, 90-95; Gudea 1986, 159). Designated building N2 the first structure was erected in the early 2nd century, dated by a sestertius of Trajan found beneath the structure. The first building was rectangular with an apsidal end. Phase II was destroyed by fire at an unknown date and the phase III building

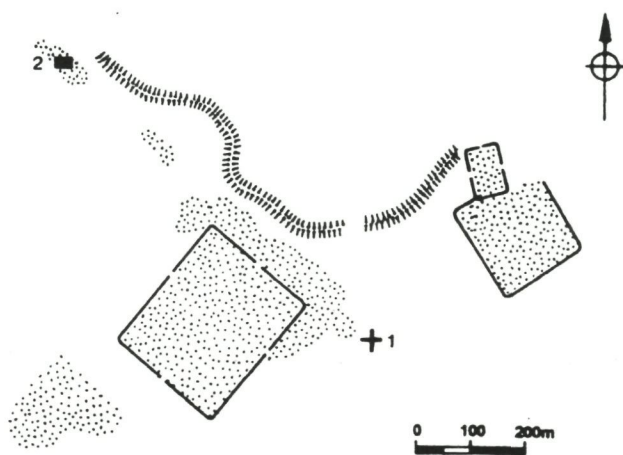


Fig. 9. - Porolisum: 1: late graves in OL5; 2: building N2.

was reconstructed using earlier Roman spoilia. It is the latter structure which Chirila *et al.* date to the post Aurelian period.

Tibiscum

Tibiscum (Fig. 11), promoted to *municipium* under Gallienus, was the last of such promotions in Dacia. The civil settlement grew up north of an auxiliary fort built to guard a bridge over the Timis river. In 1975 Moga discovered a hut in the remains of the fort (Benea & Bona 1994), but the most extensive evidence of continued settlement lay in the vicus. In several buildings, II, III, X late changes to the internal arrangements were judged to be post Roman; whilst in building VIII, a late Roman wall was identified in association with a pottery kiln (Benea 1982, Figs. 14, 16); and in building VII a rectangular structure in the third phase was also interpreted as post Roman.

In addition to the structural evidence a hoard of 971 coins, terminating with an issue of Arcadius, was discovered in the fort area (Chirila *et al.* 1974). Two further objects are less convincing evidence of activity. One is a ceramic lid on which a simple cross has been inscribed, which Protase (1993, 19) suggest is Christian. The cross is probably a potters batch mark however. The second object is a plain lamp which Protase identified with the Ipotesti-Cindesti culture of the 6th century by Protase, but in isolation without specific characteristics it is just as likely to be early Roman (Benea, Petrovsky & Petrovsky 1982, pl. I.4, VI.1).

The evidence from the cities suggests a range of activities in the post Roman period. The settlement evidence is patchy and although this could result from excavations which in the past focused on monumental structures, in many cases either excavation has been widespread or, like Napoca, has been dictated by rescue opportunities. Not only therefore were the old sites sparsely inhabited but they were still the location for romanised ceramics production and they were in receipt of small amounts of Roman coin. This simple statement seems superficially to confirm the established vision, but it is however inadequate. With the exception of the 4th century lamp found in the fill of the kiln at Sarmizegetusa all the remaining structural reports have resorted to generalisations such as 'post Aurelianic' (Chirila *et al.* 1980, 94) at Porolissum or '4th century' at Tibiscum, (Benea & Bona 1994, 121). In both these examples as well as the remaining structures from Apulum, Sarmizegetusa and Potaissa the date assigned to the structures of the post Roman cities therefore depends upon the relative chronology of a stratigraphic sequence. Assign-

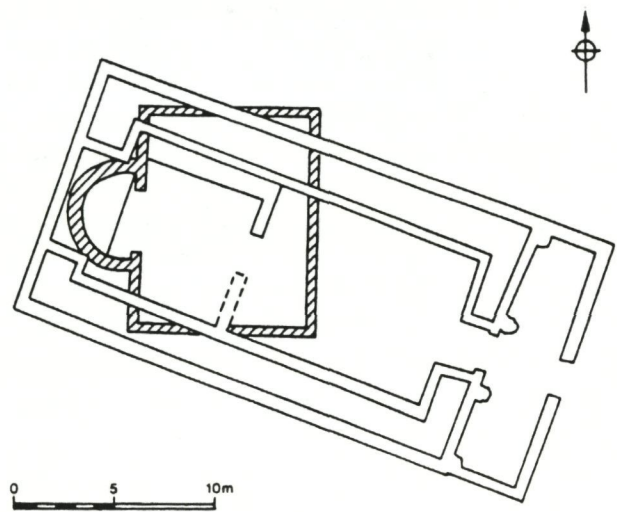


Fig. 10. - Building N2 at Porolissum.

ing dates to these sequences depends upon a series of value judgements. The most important of which are that the use of Roman spoilia, or dry stone construction above mortared stone built Roman structures, confers a post Roman date. The situation has developed because artefact finds from the 4th to 7th centuries are dominated by cemetery assemblages and are rarely found as part of a stratigraphic sequence. The situation has been made more difficult however because no detailed ceramic sequence has yet been established for the Roman period so that distinguishing between romanised ceramics of either pre- or post-Roman date is impossible. Inevitably the only viable dating framework is provided by coins, bronze artefacts or imports all of which are rare on the town sites. The practice of archaeomagnetic dating has yet to be established in Romania. Furthermore because most individual artefacts from the towns in the past have been chance finds and lack any

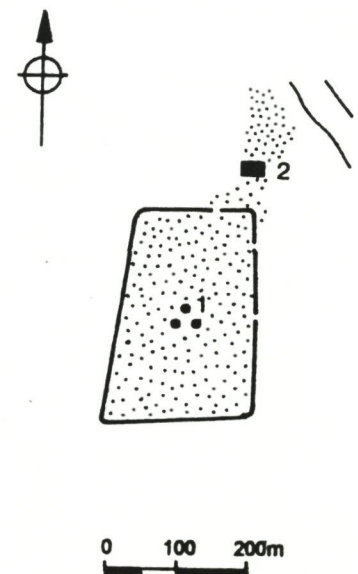


Fig. 11. - Tibiscum:
1: hoard of 4th century coins from within the fortress;
2: post Roman structures in buildings II, III, VII, VIII.

significant structural context a tendency has developed of interpreting the terminal dates of Roman coin sequences to indicate either the final decline of a town or its destruction at the hands of migrating tribes, in particular the Huns. Consequently although there is structural evidence for continued settlement in the cities it is both decontextualised and ahistoric which significantly reduces the potential for any interpretation.

Town and country, the landscape of Dacians, Slavs, Sarmatians, Goths and Huns

In the past the survival of cities has been linked to an economic model in which their main function was that of a market place. Yet some recent surveys (Rich 1992, Christie, Loseby 1996) have emphasised the monumental and ceremonial aspects of city function inferring that even in the early period provincial cities were not centres of large populations. Given the extent and density of monumental structures from the Dacian cities this may well be an applicable model in Roman Dacia. Both the archaeological evidence of dispersed settlement and current theoretical approaches suggest that the significant relationship for the survival of the city is with its hinterland.

The landscape of post Roman Dacia was characterised by valley bottom settlement in which sites were repeatedly re-founded in preferred locations. Botanical and artefactual evidence confirms that sedentary agriculture was the basis of this settlement pattern. Dual rite cemeteries which include grave goods such as brooches, beads, combs, ceramics and glass vessels not only indicate a concern for the afterlife, but some contact with the Roman empire. The presence of pottery kilns and cylindrical smelting furnaces at settlement sites also suggests a similar technological base to earlier Romano-Dacian rural settlement (Ellis 1996) but without the extensive industrial sites, such as the fineware centre at Micasasa (Mitrofan 1990), which had ceased production with the abandonment of Dacia. At its fullest extent this cultural assemblage, the Sintana de Mures-Chernahov culture, stretched from Kharkov beyond the Upper Don to as far west as the Banat (Heather & Matthews's 1991, Map 2). The origin and identity of this cultural group is contentious. Dolukhanov (1996 153) interprets the 1st century coins from the Upper Don and Dniester to suggest an early slavic origin, whilst Heather & Mathews (1991) explicitly accept that it represents the Goths. The technological and settlement continuities however tend to support the prevailing view in Romania that it originated in the mid 3rd century and survived into the 5th and there-

fore represents the indigenous and surviving Romano-Dacian population. None of this is to deny the invasions of the 4th and 5th centuries and Ellis and Alexianu have argued that Sintana de Mures in Moldavia and beyond represents a polyethnic agglomeration of Dacians, Sarmatians and Goths until the 6th century. Clearly the series of rich cremations characterised by grave 2 at Apahida, near Cluj, are Gothic (Greene 19**), but the paucity of such burials and the continuities already noted suggests few Goths, actively settled in Transylvania (Diaconu 1975, MacKenzie 1986 122) and that power, whilst concentrated in the hands of a few individual Goths was not dependent upon their occupation of a specific location such as a city or fortress rather on the presence of their retinue. A similar picture of Hunnic, Gepid (Kiss 1994) and Avar settlement following the invasions of the 5th century is now emerging (Meana-chen-Helfen 1973, Khazanov 1983, Thompson 1996 (ed. Heather)).

The significance of the Sintana de Mures period for the cities lies in four areas: the evidence of technological continuity; the dispersed settlement, the widespread distribution of imported Roman artefacts and the tributary power structure. The former indicate the continuing presence of the rural indigenous population whilst the latter indicates the direction of trade was predominantly with the eastern Roman empire (Duncan 1993). Moreover the riverine distribution of coin (Preda 1975, Fig. 1), amphora and glassware (Hausler 1979) indicates trade occurred in the rural settlements and this contrasts with artefactual evidence from the cities. Furthermore the ceramics produced at Sarmizegetusa and Monastur at Napoca seem only to have had a restricted distribution. Lastly the structure of authority, itinerant, based on the retinue and associated with rural locations such as Apahida allowed the cities to survive at least as settlements. The evidence from the amphitheatre at Sarmizegetusa suggests some may have been local centres of residual authority.

A second aspect of rural settlement which is important is that by the 6th century differences between the area of Muntenia, Moldavia and southeastern Transylvania and northern Transylvania were appearing. In the south these centuries were characterised by the Ipotesti-Cindesti culture in which hand made ceramics prevail and where radiate headed brooches found in grave assemblages suggest an identification with the Slavs in an area where they are historically attested. Byzantine imports indicate trade continued in this area with the east. In the north the Sintana de Mures however gradually assimilated influences from the migrations of Slav, Avars and Gepids but significantly lost contact with the Byzantine empire.

It was not, however, until the 9th century when the Dridu culture stretched from the Danube across Transylvania and that once again contact was established with the Byzantine empire.

The landscape context, therefore, provides the key to the condition of the post Roman cities. Deprived first of their garrisons by Gallienus, then of their administrative function by Aurelian the inhabitants were forced to re-negotiate not only their economic but their social structure. The settlement pattern was at best dispersed and even without a clear dated sequence it is clear few people remained in the cities and in some areas buildings simply decayed without extensive robbing. Those who remained re-created the cities as settlements which were characterised by small dispersed, probably agricultural, settlements amongst which cemeteries were established and between which black soil horizons began to accumulate. Authority may have been lodged in at least one city, Sarmizegetusa, although the itinerant courts of post Roman groups largely were located elsewhere.

Clearly the cities were not centres of trade but nor were they destroyed by the Huns. The 7th century artefacts from Sarmizegetusa and Porolissum suggest that settlement continued and that the termination of the coin lists in the mid 5th century merely indicates the cities were cut off from eastern sources of coin.

The real end for the Roman cities could, therefore, have occurred as late as the 7th or 8th centuries before the ceramics of the Dridu culture became widespread. In the east when the earliest medieval towns were established as capitals of the vassal voivodate of Wallachia and Moldavia a significant shift to the hills and away from the plains had taken place (Gutkind 1964-72 93) but in the interior the 9th century voivodates of Transylvania, Menomorut and Glad may have developed fortified semi urban centres such as Moresti and Blandana, but including Monastur, near Cluj, and Balgrad, near Alba Iulia. It was not however until the 12th century that urban settlement was to reappear, and not until the 13th century when Sibiu, Rodna, Alba Iulia and Bistrița were referred to by contemporary sources as cities (Pascu 1982, 54 ff.).

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Córdoba under the Umayyads, a ‘Syrian’ Garden City?

When I ask the question whether one can describe Córdoba as a “Syrian” city, I am rather thinking in terms of Córdoba as the new home for the exiled Syrian Umayyad prince, Abd al-Rahman I al-Dakhil. To what extent did the Umayyad look upon Córdoba as his Damascus-in-exile and how far did he and the Umayyads attempt to recreate in Córdoba a new Damascus?

There are many immediate and obvious similarities between the two Umayyad cities: Damascus, 690 metres above sea-level, lies 100 kilometres from the sea separated by the Jebel el-Lubnaan and the Jebel esh-sharq which act as a rain shadow. As a result, the climate of Damascus is one of extreme aridity and very high temperatures during the summer months with an irregular supply of rainfall (little more than 250-300 mm) that falls in only three months of the year. Likewise, Córdoba, situated in the Guadalquivir valley at a height of 110 metres above sea-level, cut off from the sea (approximately 130 kilometres distant) by the Cordillera Subbética to the south, experiences very high summer temperatures and little rainfall (and that irregular) in the summer months (approximately 2.7% of the annual average of 674 mm)¹.

However, both cities benefit from an abundance of water from the respective natural drainage systems; the river Barada flowing west from Lebanon and providing Damascus’ hinterland with an elongated oasis. Likewise, the Guadalquivir offers an endless supply of water with which the whole of the valley surrounding Córdoba can be irrigated.

Apart from these obvious and superficial similarities between the two cities, there are many more coincidences in the development of their urban topography. Damascus was a city which, after its capture by the Arab forces, experienced a renewal and ex-

tension of the conquered model. The Roman imperial design with its rectangular enceinte traversed by an east-west *Cardo Maximus*, and its system of water distribution, was adopted by the Arabs and adapted to their particular needs. After the capture of the city by the Arabs in 635 AD, the palace/mosque complex was built on the site of the Temple of Jupiter. However, by 705 AD, the mosque was inadequate to house the ever-increasing number of faithful, so al-Walid confiscated the church of St. John the Baptist, offering the Christians other sites in exchange in order to build the Great Mosque. Similarly, the Muslim historians describe Abd al-Rahman I as purchasing the half of the Church of St. Vincent occupied by the Christians, giving them permission to build other churches outside the city walls.² The Great Mosque of Damascus, measuring 136 x 37 metres, was surpassed in Córdoba, with its 178 x 125 metres (covering an area of some 22,250 m²), making it for centuries the third largest mosque in the world. There are similarities in the construction of the two mosques; both had a *sahn* or rectangular patio to the north of the prayer hall; both sanctuaries were of simple conservative hypostyle plan divided into bays and aisles that ran perpendicular to the *qibla* (twelve bays and eleven aisles in Córdoba, three arcades of twenty-two arches divided by a transept in Damascus). Even the most original feature of the Great Mosque of Córdoba, the eleven superimposed arcades of horseshoe arches, composed of alternating red and white voussoirs and constructed of bricks and stone, may well have Syrian origins, in that quartered marble panelling, a peculiarly Umayyad technique, has been observed in both the Mosque of the Dome of the Rock in Jerusalem and at the Great Mosque of Damascus.³

¹ Statistical information from *La Geografía de España*, Vol. I, Barcelona, 1989, 348.

² IBN IDHARI, al-Marrakushi, *Kitab al-bayan al-Mughrib*, ed. G.S. COLIN and E. LÉVI-PROVENCAL, Leiden, 1951, Vol. 2, 229 and al-Maqqari, in P. DE GAYANGOS, *The History of the Mohammedan Dynasties*, London, 1840, Vol. 1, 217-218: both

quote this story as compiled by al-Razi. Cresswell considered that the story had been transposed from Damascus, probably brought to al-Andalus in the 12th century by Ibn Khubayr, but this seems unlikely if we accept al-Razi as having written in the 10th century.

³ See Jerrilyn D. DODDS, *Architecture and Ideology in Early*

To go back to the year 756 AD and the arrival of the exiled Umayyad, Abd al-Rahman I al-Dakhil: what was it about Córdoba that attracted his attention and which would have influenced his choice in establishing the roots of the newly-displaced Umayyad dynasty in this particular location? Of course, we have one of Abd al-Rahman's own poems, compiled by al-Razi, which he dedicated to a single palm-tree that he had come across just to the north of Córdoba. On seeing the palm-tree, an unusual sight in the plains of Andalucía, he was purportedly filled with nostalgia for his forbidden homeland and, in particular, for his uncle's Syrian residence, al-Rusafa. He wrote:

In the centre of al-Rusafa there appeared a single palm-tree in a western land far from the home of palmtrees. I said: "it seems to me that I also live in a far exile and separated by a great distance from my sons and family. You have grown in a foreign land and both of us are exiled, far from home."⁴

As a result, he had a large estate built, surrounded by gardens, which he named al-Rusafa. That this *khabar* is apocryphal there is no doubt; it clearly follows the pre-Islamic Arabic poetic tradition with its synecdochic reference to the unit in question acting as the paradigmatic agent in conjuring up the image of the desired one. However, leaving aside the apocryphal nature of the story, it does contain an aesthetic which seems to be idiosyncratic to the Umayyads and which we can see put into practice not only in the design and construction of their own palaces but also in the blueprints for the urban landscape of their cities: furthermore, it is an aesthetic that we cannot see in the palatial architecture of the Abbasids and which will be curtailed (and eventually suppressed) by the increasing need for security and the concomitant militarisation of the state.

I am referring to the aesthetic, which may well owe its origins to the pre-Islamic tribal heritage of the bedouin of the Arabian peninsula, of the nomadic

encampment, the tents erected under the palms of an oasis, the interaction of habitat and landscape. There is both a geographical and ecological interaction between the city and the surrounding countryside. One can go as far as to say that there was an agricultural component that linked Córdoba to the outlying villages, not only inasmuch as the urban topography would have allowed for gardens and agricultural activity within the walls of the city, but also in that the villages of the Cordoban hinterland would have been regarded as quarters and suburbs of the city itself. The inhabitants of the surrounding villages would have come to sell their produce in the market places of Córdoba's suburbs and, during times of economic hardship or political uncertainty, they would have come to the city, the extension of their rural habitat: "Many villagers or nomads settled there permanently, forming quarters or suburbs of their own, while others fell into an unassimilated mass of lumpen-proletarians" is the process as described for Damascus by Lapidus.⁵

Concomitantly, landowning families who were part of the city's bourgeoisie resided in the villages. As Lapidus has shown for Damascus, there were major suburbs such as al-Salihiyya and large villages in the surrounding fruit-growing oasis the Ghuta "which impinged on the city itself and might also be considered part of a 'metropolitan' conglomeration."⁶ In the same way, we have documentary evidence for the *Marca Superior* (or the Upper March of al-Andalus) of members of the Leridan bourgeoisie who held properties in the surrounding villages of the Plá d'Urgell and upstream from the town of Tortosa further along the Ebro valley; in Alfes, Carretela, Convento de Escarpe, Aytona, Jebut, Alcolea and Montagut.⁷

In Córdoba, we know that, under the Umayyads and particularly by the time of the establishment of the Caliphate in 929 AD, the valley of the Guadal-

Medieval Spain, Pennsylvania, 1989, 95 and note 50, and *Al-Andalus. Las artes islámicas en España*, Madrid, 1992, 15 for a resume of the arguments of J. SAUVAGET, *La Mosquée Omeyyade de Medine*, Paris, 1947 and K.A.C. CRESWELL, *Early Muslim Architecture*, London, 1940.

⁴ IBN IDHARI, *Kitab al-bayan al-Mughrib*, op.cit., Vol. 2, 60.

⁵ Ira M. LAPIDUS, *Middle Eastern Cities*, Berkeley, 1969, 65. In Córdoba, recent excavations carried out in the mosque of Sta. Clara in c/ Rey Heredia have not uncovered any evidence of settlement on the site prior to the construction of the 10th century mosque. However, in the period after the Christian reconquest, when the mosque was converted into the monastery of Sta. Clara, the land situated between the monastery and the Great Mosque/cathedral was used as a market-garden, implying that this whole area, well within the confines of the walled enceinte, had a history of usage as a market-garden.

⁶ Ira M. LAPIDUS, *Muslim Cities in the Later Middle Ages*, Harvard, 1967, 79.

⁷ Of course, this evidence is Christian, immediately after the reconquest of the cities of Lerida and Tortosa in 1148/1149 AD, but they are sufficiently close in time to give us a reasonable insight into the type of land tenure outwith the walled enceinte of the two cities. In a donation made in 1153, King Alfonso of Aragón donated to Iñigo Galindez the castle of Peralta and Alcolea "et illas casas de alfaki et illa almunia de Moç Arrabali" in Berbegal: *Archivo de la Corona de Aragón*, carpeta 30, number 189. On 20 July 1156, Petrus, son of Albinus, sold to Petrus Alcavi and his wife Maria "those houses in Tortosa belonging to Mohiba, daughter of Abi Buceina, who was the wife of Mosseric b. al-Musa, with the acquiescence of Aisha, wife of Hisham al-Hajar and Fatima, wife of Muhammad b. Amin, along with seven fields in Xerta" (a small village some

quivir was scattered with palaces, *al-muna* and country estates belonging to the Cordoban nobility and bourgeoisie. Al-Razi tells us that Córdoba was "surrounded by many beautiful estates, whose trees hang over her and which produce delicious fruits to eat: and they are very tall trees of many species... and alongside the bridge there is an excellent field planted with wonderful trees: to the north lies the sierra, also covered with vines and trees."⁸

There were 11 palaces, 22 *al-muna* and 12 *arbad* (or suburbs) surrounding the inner city of Córdoba, mainly on the right bank of the Guadalquivir, and especially to the north and west of the city. I would like to look at the topography of these *almuna* and *arbad* in greater detail and place them in their ecological relationship within their urban hinterland.

Ibn Bashkuwal lists a total of 21 suburbs⁹, two to the south – Shaqunda¹⁰ and munyat A'jab –, three to the north – rabad Bab al-Yahud, rabad masjid Umm Maslama and al-Rusafa –, seven to the east – Salar, faran Barbal, al-Burj, munyat 'Abd Allah, munyat al-Mughira, madinat al-'Atiq and madinat al-Zahira – and nine to the west – Hawanitu-r-rihan, rabad al-Raqqaqin, rabad masjid al-Kahf, Balat Mughith, rabad masjid al-Shaqa'i, rabad Hammam al-Anbiri, rabad masjid as-Surrun, rabad masjid ar-Rawdah and the rabad al-sujun al-qadim. Few of these have been identified by archaeological excavation, except part of the rabad al-Rusafa, where a new hypermarket has been built, and a large unidentified area of the western suburbs. The former was situated just to the south of the present Parador Nacional of Arruzafa, where recent excavations have uncovered the remains of a variety of *almuna*, Roman villas and irrigation systems (in fact, one *aljibe* of the early medieval period has been preserved in the basement of a private suburban detached house!).

The most spectacular discoveries were uncovered as a result of rescue excavations in the last four years: however, it is necessary to sound a word of caution

about the real achievements of the archaeologists and to denounce both possible corruption and sheer obstinacy on the part of both the construction companies involved and the Ayuntamiento de Córdoba, which has already caused the widescale destruction of vitally important information about the development of Córdoba's Roman and early medieval urban topography. The most lamentable and widely-publicised case is that of Cercadilla¹¹, where it was decided to construct the new railway terminal for the high speed train connecting Madrid and Seville, the AVE. After preliminary soundings it became clear that a major structure covered the whole of the area; an enormous late Roman palace complex constructed over an earlier Roman villa and cutting into the former, various Mozarabic sanctuaries and tombs.¹² The monumental nature of the late Roman palace complex, forming a semi-circular criptoportico of 105 metres diameter, protected by strong walls and an entrance flanked by towers, implies the presence of an important imperial administrative centre, perhaps even the headquarters of the provincial government. Although a major excavation of the site took place, involving 30 archaeologists and 100 workmen, the efforts of one of the directors, Pedro Marfil, to try to halt the construction of the railway terminal, were of no avail. The Town Council of Córdoba has to bear the responsibility of having approved the destruction of one of the most important archaeological discoveries of the late Roman/early medieval period to have been unearthed in the past few decades, and supposedly in the name of technological progress. Considering the fact that the Junta de Andalucía (the autonomous government) was in favour of relocating the railway terminal and that, in any case, the present location will not serve Córdoba adequately in the years to come (as the city continues to expand in a westerly direction), one must reluctantly come to the conclusion that if it was not technological progress that motivated the interests of the Town Council, it must have been sheer greed and

eleven kilometres upstream from Tortosa): A.C.A., Armario 4 (Tortosa), number 24. Finally, on 20 July 1169, Arnau de Turre Rubia donated a hospital in a place just outside the walls of Lerida: A.C.A., Gardeny, armario 11, number 2012.

⁸ P. DE GAYANGOS, *Sobre la autenticidad de la Crónica denominada del moro Rasis*, Memoria de la Real Academia de la Historia, Vol. 8, Madrid, 1852, 36.

⁹ Quoted by AL-Maqqari, *Nafh al-Tib min ghusn al-Andalus al-ratib wa dhikr waziriha Lisan Ibn al-Khatib*, ed. Dozy, Dugat, Krehl and Wright, *Analectes sur l'histoire et la littérature des Arabes d'Espagne*, Leiden, 1855, Vol. I, 3-4, and in P. DE GAYANGOS, *The History... op.cit.*, Vol. I, 205-206.

¹⁰ Taken from A. ARJONA *et al.*, La topografía de la Córdoba califal (1), Boletín de la Real Academia de Córdoba, julio-dic.

1994, no. 127, 218-219.

¹¹ See R. HIDALGO PRIETO & P. MARFIL RUIZ, El yacimiento arqueológico de Cercadilla: avance de resultados, *Anales de Arqueología Cordobesa* 3, 1992, 277-308.

¹² C. MARQUEZ, R. HIDALGO & P. MARFIL, El complejo monumental tardorromano de Cercadilla en colonia patricia Corduba, in: *L'Africa romana, Atti del IX convegno di studio Nuoro, 13-15 dicembre 1991*, Sassari, 1992, 1039-1050 and R. HIDALGO PRIETO & A. VENTURA VILLANUEVA, Sobre la cronología e interpretación del palacio de Cercadilla en Corduba, *Chiron - Mitteilungen der Kommission für alte Geschichte und Epigraphik des Deutschen Archäologischen Instituts* Band 24, 1994, 221-240.

corruption. There were enormous commercial interests involved in the construction of the AVE terminal on the particular lands purchased from R.E.N.F.E. (by whom, one wonders?) and, once having agreed the sale of the land, there were similar pressures in order to start the construction work before a possible alternative site was found.

At Cercadilla, apart from the exciting discoveries of both the secular administrative late Roman buildings and the ecclesiastical and ritualistic remains of the Visigothic and Mozarabic sanctuaries and tombs, there was also a "large group of habitats of the Islamic period...in which part of the road system and a complex of dwellings were uncovered."¹³ It seems that, associated with the Mozarabic sanctuaries, a Mozarab suburb had been constructed and, judging from the ceramic evidence unearthed, was of an early date (i.e. emiral).¹⁴ Unfortunately, there was insufficient time to ascertain either the extent of this suburb or further details of the type of house construction. The glimpse that the archaeologists were to gain before the mechanical diggers and bulldozers moved in implied a reasonably sophisticated urban layout, especially in the construction of the suburb's streets.

Fortunately, further confirmation has come to light to the south of Cercadilla, where a series of rescue excavations has uncovered a formidable urban complex of the 10th century. On the debit side, unfortunately there are some depressing stories of corruption having even reached some of the city's archaeologists and which has had a devastating effect on the effective excavation and interpretation of the early medieval urban topography of the western suburbs. The area concerned (known as the Polígono Industrial del Poniente or the Northern Industrial estate) covers a total area of approximately 90 hectares, of which already around 70 hectares has been developed, "excavated" and built over. The greater part of this was excavated in sight of the bulldozers: a large

number of habitats were uncovered, aligned along wide and straight roads running on a north-south axis, associated with a sophisticated irrigation and sewage system aligned along a similar axis. The houses were built of limestone blocks, paved with red brick and supplied with water from various fresh water wells. I have this information only second-hand: as far as I know, the only photographs published of these excavations were by Arjona Castro¹⁵, who did not excavate the site and is not an archaeologist. No report has been published, no diagrams have appeared in any form and it has been suggested to me that, owing to the sheer extent of the area uncovered and the very short time allocated due to the contractors' pressure, no serious archaeological excavation took place.

Fortunately, this situation is not repeated in the much smaller complex further to the south, situated between the Parque Deportivo Fontanar and the Parque Cruz Conde. This area, approximately 4.5 hectares, also was the subject of a rescue excavation but appears to have been professionally excavated, with a high standard of planimetric and photographic information.¹⁶ A highly sophisticated urban topography has come to light here, divided by a series of nine streets. Five of these, with a northwest-southeast orientation, have a width of between 4.1 and 6.75 metres¹⁷, the remaining four crossing these along a northeast-southwest axis. Two of these latter streets (Streets 5 and 6) are much wider and connect the two public zones of the suburb, a sort of rectangular open plaza and a mosque. The forum-like plaza (49.15 x 32.20 metres) is surrounded on three sides by a pavement of slate and stone flagstones, of approximately five metres width¹⁸, which may well have been occupied by small shops. The mosque (the only mosque of a suburb which has come to light until the recently excavated mosque of Sta. Clara inside the walled enceinte), uncovered in the south-eastern sec-

¹³ P. HIDALGO PRIETO & P. MARFIL RUIZ, *El yacimiento...* op.cit., 282.

¹⁴ Ma DEL CAMINO FUERTES SANTOS & M. GONZALEZ VIRSEDA, Nuevos materiales ceramicos emirales de Cercadilla (Córdoba): ensayo tipológico, *Anuario de Arqueología Cordobesa* 5, 1994, 277-301.

¹⁵ A. ARJONA CASTRO, Aproximación al urbanismo de la Córdoba musulmana a la luz de las recientes excavaciones arqueológicas, *Boletín de la Real Academia de Córdoba*, julio-diciembre 1993, N° 125, 85-99 and especially 87, 90 and 95. Also, A. ARJONA CASTRO *et al.*, La topografía de la Córdoba califal (1), *Boletín de la Real Academia de Córdoba*, julio-diciembre 1994, n° 127, 215-255 and especially 227-228. He was also the first to publish photographs of the excavations of the rabad of Rusafa in *La topografía...* op. cit., 222.

¹⁶ Ma Dolores LUNA OSUNA & Ana Ma ZAMORANO ARENAS,

Informe preliminar de la intervención arqueológica de urgencia en el sistema general U-1 (Finca Fontanar), *Anuario Arqueológico de Andalucía*, 1992, (in press). I will take the opportunity here to thank Srtas. Luna Osuna and Zamorano Arenas for allowing me access to the unpublished *Informe preliminar* and for the photographs of the excavation.

¹⁷ Street 1 = 6.75 m; Street 2 = 5.9 m; Street 3 = 4.1 m; Street 4 = 5.4 m; Ma Dolores LUNA OSUNA & Ana Ma ZAMORANO ARENAS, Unpublished *Informe preliminar*. *ibid.*, 24-29.

¹⁸ Only 2.7 m wide on the north side, but the east side is 5 m and the south side, although also only being 2.7 m wide like the north side opposite, has a continuation of a sort of gravel pavement of 2.5 m width: Ma Dolores LUNA OSUNA & Ana Ma ZAMORANO ARENAS, Unpublished *Informe preliminar...* *ibid.*, 21-23.

tor of the site, is in both design and decoration, similar to other Cordoban mosques of the 10th century¹⁹: a rectangular *sahn* to the north with the prayer hall itself divided into three aisles with a double arcade of columns, perpendicular to the wall of the *qibla*, oriented along a south-easterly axis.

Apart from these public areas, the rest of the site was covered with the remains of habitats. Generally, these seem to be built on foundations of limestone and rounded blocks of quarry stone, with socles of hewn stone, but the rest of the construction is of tapial (a sort of adobe). Although the quality of construction (simple techniques that would not have necessitated the presence of a master-mason or even a foreman) is not technically complex, the houses were built with an efficient and well-planned sewage system. For example, in the southern zone of Trench 1, the structure (identified as number 48), consisting of two rooms (one of which is 2.4 metres wide), represented in its first phase a patio of red-painted lime plaster, with connecting latrine, and in its second phase undergoing a fairly comprehensive restructuring, having an open drain added, made of rows of brick and with a lime-plastered floor, which would have flowed out into the street, a system similar to that found in the patio of House 2 in Pechina (Almería), which dates from the same period²⁰. Similar constructions were found in Trench 3, where habitats belonging to three different houses were identified.²¹

Apart from the barely 4.5 hectares systematically excavated by Luna Osuna and Zamorano Arenas, in 1995 there only remained a further 20 hectares which had already been scheduled for development. One hopes that this has been scheduled properly and excavated scientifically, allowing further information to come to light about the remarkable nature of the urban topography of Córdoba's 10th century suburbs.

Unfortunately, we are not in much of a position to correlate the above-mentioned western suburbs with those listed by Ibn Bashkuwal and Ibn al-Khatib. The area was known generically as *al-janib al-gharbi* or the western sector, and would have included the rabad

al-Raqqaqin (the quarter of the parchment makers) and the *arbad* associated with the suburb's mosques, the rabad al-masjid al-Shifa', the rabad al-masjid Masrur, the rabad al-masjid al-Kahf, but we are not in a position at the moment to identify, for example, the mosque uncovered in the Finca El Fontanar with any of the aforementioned mosques.²²

Still further to the west of the *janib al-gharbi* were several palaces and associated estates belonging to the Cordoban aristocracy. The *almunya* of Dar al-Na'ura was identified after archaeological excavations in the late 1950's unearthed the remains of a palace of the caliphal period in which decorative panels of a quality of execution even superior to those found in Madinat al-Zahra' were uncovered and which showed clear Syrian influences in composition. There were other *almunya*, mentioned in the Arabic sources but which have not been identified through archaeological prospection: the *almunyat* Arha' Nasih (described as the first rest-stop on the road between Madinat al-Zahra' and Córdoba, the other being Dar al-Na'ura); the *almunyat* Ibn al-Qurashiyya (also known as al-Shamamat or the melon fields) on the left bank of the Guadalquivir along the road which connected Córdoba and Palma del Rio; the *almunyat* Ibn 'Abd al-'Aziz, situated so close to Madinat al-Zahra' that, on 19th September 971 AD, the sons of 'Ali b. al-Andalusi, who were lodged there while awaiting an audience with the caliph al-Hakam II, were escorted by a guard of honour, formed from 16,000 men from the Cordoban suburbs, which stretched along the whole distance between *almunyat* Ibn Ibn 'Abd al-'Aziz and the South Gate of Madinat al-Zahra'.²³ This *almunya* has tentatively been identified with some of the foundations excavated in Los Llanos del Castillo: blocks of sandstone and rooms decorated with painted socles of red earth were discovered, as well as small sewage drains and an *alberca* (water reservoir).²⁴ Similar constructions were unearthed at the beginning of this century in another *almunya*, that of al-Rumaniyya, situated three kilometres to the west of Madinat al-Zahra'.²⁵ The

¹⁹ For example, see V. ESCRIBANO UCELAY, La mezquita de la calle rey Heredia, *al-Mulk* 4, 1964-65, 83-101.

²⁰ *Ibid.*, 13-15. For Pechina, see F. CASTILLO & R. MARTÍNEZ, La vivienda hispanomusulmana en Bayyana-Pechina (Almería), in: *La casa hispano-musulmana. Aportaciones de la arqueología*, Granada, 1990.

²¹ Unpublished *Informe preliminar...* *ibid.*, 23-29 (House 1); 29 (House 2) and 29-32 (House 3).

²² Arjona Castro has identified the mosque excavated in the Finca El Fontanar as the masjid al-Shifa', *La topografía... op.cit.*, 229-233, but there is no reason to identify the recently uncovered mosque with this particular mosque listed by Ibn

Bashkuwal.

²³ Ibn Hayyan in E. GARCÍA GÓMEZ, *Anales palatinos del califa de Córdoba al-Haam II, por Isa ibn Ahmad al-Razi*, Madrid, 1967, 64-70, and especially 65.

²⁴ Ma J. MORENO GARRIDO & M. COSTA PALACIOS, Excavación de urgencia en el yacimiento, Llanos del Castillo, *Anuario Arqueológico de Andalucía* 3, 1987, 182-187.

²⁵ R. VELÁZQUEZ BOSCO, *Medina Azzahara y Alamiyya*, Madrid, 1912 and M. OCAÑA JIMÉNEZ, Las Ruinas de 'Almiriyya': un yacimiento arqueológico erróneamente identificado, *Al-Qantara* 5, 1984, 377-381.

almunya has preserved many luxurious architectural details; marble slabs decorated with floral motifs, capitals with Kufic inscriptions, basins with orientally-inspired zoomorphic designs, and rooms with alabaster floors. It was constructed by the *fata* Durri and donated to al-Hakam II during the course of a magnificent feast on 18th May 973 AD²⁶.

We have much less information regarding the suburbs to the east of Córdoba. Apart from the seven listed by Ibn Bashkuwal, there was a royal *almunya*, the *almunya al-yanna rabanalis*, which Ibn Hayyan records as belonging to 'Abd al-Rahman III.²⁷

It seems clear that the topographic development of the Cordoban suburbs was something that took place over a long period of time which I associate with the period of the Umayyad presence in Spain. Certainly, the furthest suburbs to the west of Madinat al-Zahra' would have been directly associated with the construction of the palatine city in the 10th century. However, some of the suburbs in the agricultural hinterland surrounding the walled enceinte date from an earlier period – many seem to be of the 9th century and remains of emiral ceramics have been unearthed, for example, in Cercadilla. One of the curious phenomenon that is coming to light through the archaeological excavation of these suburbs is the nature of their urban topography; geometrically-aligned street networks, served by an intricate irrigation and sewage system. The question is therefore begged: how does this type of topography relate to the stereotyped representation of the urban layout of the medieval Islamic city, that of a chaotic maelstrom of alleyways, snaking their ways across the densely-populated quarters confined within the city walls?

I think there is an answer to this apparent contradiction although, unfortunately, the problems associated with the carrying-out of archaeological excavation within the inner city make it difficult to call upon verifiable evidence to support anything more than a hypothesis. Firstly, the original occupation of the area within the confines of the Roman city of *Colonia Patricia Corduba* in the early days of the Arab conquests would have respected the geometric grid topography associated with the Roman settle-

ment. Excavations in various parts of the city show the Muslims taking advantage of the Roman sewage system and the street alignments.²⁸ New urban developments, in the Umayyad period, outside the walled enceinte, seem to suggest the adoption of the Roman geometric urban topography and a similar adoption of the Roman system of irrigation, drainage channels and aqueducts. Over the centuries, the urban topography inside the walled enceinte, equally in Damascus and in Córdoba, would have undergone a dramatic change. The *Cardo Maximus* was taken over by the merchants of the *suq* who occupied different parts of the central avenue. Largely reflecting the lack of municipal powers to regulate the concession of trading licenses, the geometric grid pattern of the Roman city would have degenerated into the haphazard development of narrow alleyways seemingly snaking in all directions, so characteristic of the Muslim *suq*. The city within the protection of the Roman curtain wall would have developed into different quarters, corresponding in function to the public buildings nearby: there was the administrative quarter, housing civil servants, around the central administrative buildings; a university quarter, near to the Great Mosque, where the *madrasat* dominated; a commercial quarter along the length of the *Cardo Maximus*, which does not seem to have been subdivided according to trade or guild. The rest of the city was divided into neighbourhoods where the inhabitants seem to have been sub-divided into smaller compartments, based on ethnic and religious identity. Each of these miniature quarters, which represented a cross-section of the social classes, enjoyed a certain economic and religious autonomy: each had its mosque, its public bath (*hammam*), its water seller (*tali'*), its oven (*furn*) and its local small market (*suwayqa*). As with the topographic changes occasioned in the commercial quarter or the *suq*, the system of communications and access within these miniature neighbourhoods also underwent a change, reflecting the increased feeling of insecurity. Only a few arteries of communication in the city allowed for free circulation; the pattern was rather one of a series of gates denying (or rather controlling) access, con-

²⁶ IBN HAYYAN in *Anales palatinos...* *op.cit.*, Madrid, 104.

²⁷ IBN HAYYAN, *al-Muqtabas li-Ibn Hayyan al-Qurtubi (al-juz al-khamis)*, ed. P. CHALMETA, F. CORRIENTE & M. SUBH, Madrid, 1979, 26 and *Crónica del Califa 'Abd al-Rahman III an-Nasir entre los años 912 y 942 (al-Muqtabis V)*, Spanish translation by Ma J. VIGUERA & F. CORRIENTE, Textos Medievales, Vol. 64, Zaragoza, 1981, 34-35.

²⁸ For example, see A. VENTURA VILLANUEVA & S. CARMONA BERENGUER, Resultados sucintos de la excavación arque-

ológica de urgencia en los solares de la c/ Blanco Belmonte 4-6 y Ricardo de Montis 1-8, Córdoba, *Anales de Arqueología Cordobesa* 3, 1992, 199-243; also in *Anuario Arqueológico de Andalucía*, 1991, 107-117. In the far west section of trench 3, the corner of a water reservoir (*alberca*) was uncovered, constructed of brick and lined with red earth, with a drainage channel in the same material. To the west of Trench 5, remains of an oven with a circular opening in the upper section, approximately a metre in diameter, were unearthed.

verting many of the alleyways in cul-de-sacs. To enter a private house, it would have been necessary first to have passed through the gate controlling access to the particular suburb, then that controlling access to the particular cul-de-sac and then, finally, that of the house itself.

I believe that this change in the urban topography of Córdoba took place in a period of great insecurity. After the death of 'Abd al-Rahman III, al-Andalus witnessed an increasing militarisation under al-Hakam II and Hisham II, the immigration of large numbers of North African warriors to protect the 'Amirid regime, the economic dislocation of the greater Umayyad family and increasing racial tension, all factors which led to the outbreak of civil war in 1009 AD and ultimately to the collapse of the Caliphate of Córdoba. During the siege of Córdoba, between 1010 and 1013 AD, both western and eastern suburbs were razed to the ground and the 'Amirid palace complex, symbol of Ibn Abi 'Amir's regime, Madinat al-Zahira, was completely destroyed.²⁹ I would not be surprised to find the sinister system of internal gates and cul-de-sacs as dating from this later period. One would be happy to be guided by information from archaeological excavations inside the city walls but here we encounter two interrelated problems; firstly, the shallow depths of the Islamic strata and, secondly, the depressing repetition of a pattern of both a lack of information about the post-Roman stratigraphy and a desire to make the most of the limited time

made available under the constraints of urban rescue archaeology by getting down to the Roman levels as quickly as possible. This seems to have been the case in several rescue excavations; that carried out in c/ María Cristina³⁰, in c/ Ramírez de las Casas-Deza 17³¹, in c/ Muñices 33³², in c/ Concepción 12³³, c/ Reyes Católicos 17³⁴, c/ Alfaro 18-24³⁵, and in c/ Ambrosio de Morales 4.³⁶

What is clear is that, either through the increasing need for urban renewal in the name of progress or due to inadequate excavation expertise or a combination of both, much of the potential information regarding the development of the Islamic urban topography of Córdoba is being lost forever. In the absence of further evidence I am inclined to rest my case for the vision of an Umayyad Córdoba as an urban conglomeration, defined by a fairly sophisticated support-system of municipal services, but also as a garden city, with garden suburbs which, although being, urbanistically-speaking, suburbs and not villages, play an interactive role with both the city within the walled enceinte and the productive agricultural hinterland of the surrounding countryside. The houses in these suburbs would have belonged to the *al-nas khasa* (the aristocracy), in the form of *almuna*, but also to the *al-nas 'ammāt*, not only the lower and middle urban classes of tradesmen, craftsmen, masons, potters, weavers, saddlers, journeymen and apprentices of various trades, but also agricultural workers who either worked the estates of the sur-

²⁹ Madinat al-Zahira was destroyed early on in the *fitna*, in 1009 AD: see AL-NUWAYRI, *Kitab Nihayat al-'arab fi funun al-adab*, ed. M. GASPARY REMIRO, *Historia de los Musulmanes de España y África, por el-Nuqarí*, Granada, 1917-1919, 74. At the same time, the suburbs around al-Zahira, like Balat Mughith where Ibn Hazm lived, were burnt to the ground: IBN HAZM, *Tawq al-Hamama fi-l-'ulf wa-l-'ullaf*, ed. L. BERCHER, *Le Collier du pigeon ou de l'amour et des amants*, Algiers, 1949, 234 and 305-307 and E. GARCÍA GÓMEZ, *El Collar de la paloma, tratado sobre el amor y los amantes*, Madrid, 1967, 287 and 244-246. For the extent of the damage to the 'Amiridpalace, see IBN AL-KHATIB, *Kitab A'mal al-a'lamfi man buyi'a qabl al-ihtilam min muluk al-islam*, ed. E. LÉVI-PROVENÇAL, Rabat, 1934, 129. In 1013 AD, the carpenters' market and the mosque in Madinat al-Zahra' were burnt down: see IBN 'IDHARI, *Kitab Bayan al-Mughrib*, Vol. 3, ed. E. LÉVI-PROVENÇAL, Paris, 1930, 107.

³⁰ Resultados de la excavación arqueológica en el solar de la c/ María Cristina en Córdoba, situada a espaldas del Templo Romano, *Anales de Arqueología Cordobesa* 5, 1994, 119-155.

³¹ R. HIDALGO PRIETO, Nuevos datos sobre el urbanismo de Colonia Patricia Corduba: excavación arqueológica en la calle Ramírez de las Casas-Deza 13, *Anuario Arqueológico de Andalucía* 1991, 118-126 and A.A.C. 4, 1993, 91-135.

³² F. GODOY DELGADO, Intervención arqueológica de urgencia en el solar de la c/ Muñices 33, A.A.A. 1989, 114-118, where

apparently the first strata associated with the Roman period started to appear only a few centimetres from the "superficie inicial", but it also seems that, initially, mechanical diggers had been used; "desde el día 22 de febrero, en que se realizó el sondeo con medios mecánicos...", p. 114.

³³ F. GODOY DELGADO, Intervención arqueológica de urgencia en el solar de la c/ Concepción 12, esquina a c/ Uceda, A.A.A. 1989, 134-137.

³⁴ M.D. BAENA ALCANTARA, c/ Reyes Católicos 17, *recayente a Plaza Gonzalo de Ayora*, A.A.A. 1989, 146-150: "la excavación arqueológica comenzó a partir de la cota -2.30 m, nivel hasta el que se encontraba vaciado el solar... así, los restos hallados corresponden a época romana, ya que las estructuras musulmanas de habitación localizadas en la 1ª fase se encontraban por encima de esa cota, y fueron desmontadas."

³⁵ A. MORENO ROSA, Informe sobre la intervención arqueológica de urgencia realizada en el solar de la c/ Alfaro 18-24 de Córdoba, A.A.A. 1990, 68-72.

³⁶ J.M. BERMUDEZ *et al.*, Avance de resultados de la excavación de urgencia en c/ Ambrosio de Morales 4, *Antiquitas* 1-2, 1991, 50-61: "En este período (bajomedieval) se engloban un derrumbe y dos cimentaciones compuestas por varias hiladas de mampuesto y ripio. Ambas presentan una orientación E-O, y no conforman ningún tipo de espacio reconocible, dadas las fuertes alteraciones sufridas por estas UU.SS. (Unidades sedimentarias) a causa del rebaje mecánico del solar.", p. 59.

rounding suburbs or even market gardens inside the inner city.

This is the urban topography representative of a society still not completely at ease within the constraints of a walled enceinte and representative of a

dynasty whose founder considered himself as being "in a far exile, far from home", that home being another Roman city which also enjoyed a geographical and ecological interaction with the surrounding countryside, namely Damascus.

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Le rôle du contrôle de l'espace public et l'urbanisme au XIII^e siècle en France

Le sujet de cette communication, relatif à l'urbanisme médiéval, n'est certes pas nouveau. Des auteurs comme Jacques Heers ou Jean-Pierre Leguay¹, pour la France, ou encore Enrico Guidoni, pour ne citer que lui², pour l'Italie, lui ont voici quelques années consacré de longues pages, fort documentées et d'un grand intérêt. Plus récemment, Guillaume Leyte a apporté une contribution précieuse sur l'aspect de la domanialité publique³.

Cependant, il paraît possible, et nécessaire, de poursuivre l'enquête et de reprendre la question, d'une part à la lecture de nouveaux textes, d'autre part du fait de l'apport que peuvent constituer des données à proprement parler archéologiques.

La difficulté de l'étude de l'urbanisme au Moyen Age par les textes provient de leur éparpillement, et, semble-t-il, de la très faible part des documents relatifs aux pratiques urbanistiques qui a subsisté dans les fonds d'archives. Il est donc nécessaire, pour se forger une image d'ensemble, de réunir une documentation concernant non pas un seul site urbain, mais, si possible, un grand nombre de villes. Par ailleurs, si les textes deviennent nombreux pour la fin du Moyen-Age, ils sont rares au XIII^e siècle, du moins en France, et exceptionnels pour les siècles précédents. Cette caractéristique des sources a, bien entendu, fortement déterminé l'historiographie du sujet jusqu'à aujourd'hui.

Les textes disponibles peuvent être regroupés en trois ensembles principaux:

1. Les statuts communaux, franchises, coutumes, libertés..., qui comprennent très souvent des clauses

concernant la voirie. Ce sont des clauses d'interdiction, plus rarement de prescription.

2. Les actes d'alignements, malheureusement apparemment exceptionnellement conservés.

3. Les documents transcrivant des enquêtes ou des éléments de procès.

Dans ces sources, on retrouve pratiquement toujours le souci de conserver et de protéger ce qu'on peut appeler, pour simplifier, le domaine public, qu'il soit défini par son appartenance au domaine royal ou à un domaine seigneurial, plus tard communal, ou par son usage commun et son utilité commune. C'est souvent, dans les textes les plus anciens, sous la forme d'une "justice" que l'autorité publique ou seigneuriale est rappelée sur, en particulier, la voirie⁴. Ce domaine public peut s'étendre aux rues, mais pas systématiquement à toutes les voies⁵, aux places, quais, etc... Cet aspect des choses a été de manière approfondie étudiée par Guillaume Leyte, nous n'y reviendrons pas ici.

De même, nous n'aborderons pas la gestion courante des espaces publics, comme l'enlèvement des ordures, ni les règlements concernant les matériaux à utiliser dans la construction. Enfin, car c'est un domaine un peu à part, nous n'aborderons ici pratiquement pas la question des créations urbaines nouvelles.

Le sujet qui sera abordé dans cette communication est donc uniquement celui du contrôle de l'espace public, sous l'angle du droit, des mesures, règlements et procédures, permettant de le traduire dans la pratique, et du niveau d'efficacité de ces mesures.

Nous allons maintenant tenter de mettre en regard les textes et la réalité archéologique.

¹ HEERS J., *La ville au Moyen Age*, Fayard, Paris, 1990; LEGUAY J.-P., *La rue au Moyen Age*, éd. Ouest-France, Rennes, 1984.

² GUIDONI E., *Storia dell'urbanistica, il Duecento*, Laterza, Rome-Bari, 1989.

³ LEYTE G., *Domaine et domanialité publique dans la France médiévale (XII^e-XV^e siècles)*, Presses Universitaires de Strasbourg, 1996.

⁴ Par exemple la *justitia* (celle du roi)... in *viaria que est in terra episcopi*, dans un secteur de Paris, 1222, MORTET V. & DESCHAMPS P., *Recueil de textes relatifs à l'histoire de*

l'architecture et à la condition des architectes en France au Moyen Age, rééd. CTHS, Paris, 1995, 867.

⁵ Certaines rues sont en effet privées, et conservées comme telles pendant quelque temps. Citons l'exemple d'une *via* incluse dans un grand tènement réunissant logements, pré, et installations industrielles, à Louviers en 1249 (BONNIN Th., *Cartulaire de Louviers*, Evreux-Paris, I, 1870, n° CLXXXII). Il semble que le passage des voies d'un statut privé à un statut public, toutefois, ait été la règle dès lors qu'il y avait ouverture au public. Les sources sont cependant très peu explicites sur ce point.

L'alignement

Le respect de l'alignement des façades privées le long de la voirie est un domaine largement développé dans les statuts et textes apparentés. On le comprend, puisqu'il est le moyen de faire respecter le domaine public que représente l'emprise des rues et des places. On retrouve l'obligation de respecter l'alignement et en particulier d'obtenir une autorisation lors d'une construction nouvelle ou d'une reconstruction le long d'une rue ou d'une place, dans les archives de nombreuses villes. A Arles, elle est présente dès 1162-1202⁶; à Saint-Denis au début du XIII^e siècle⁷. A Paris, on la connaît par un texte de 1270⁸. A Lyon une enquête de 1273 renvoie à une pratique déjà présente depuis cinquante ans au moins, donc les années 1220⁹. A Toulouse, les Coutumes de 1286 retranscrivent une pratique elle aussi antérieure en 1286¹⁰. Il en va de même à Bayonne en 1294-98¹¹. Un peu plus tardivement, l'alignement est une *licentia edificandi*, à Avignon¹². Il s'agit bien, en fait, d'une autorisation de construire, dans ce cas explicitement dénommée comme telle.

Avant de considérer les données archéologiques qui nous permettraient de juger de l'efficacité de cette obligation, il nous faut d'abord décrire la procédure de l'alignement.

De ce point de vue, les textes sont encore plus rares, ou, du moins, ont peu attiré l'attention des historiens¹³. Les statuts, coutumes et autres ne sont pas explicites sur ce point, qui n'est renseigné qu'à l'occasion d'enquêtes et d'actes ponctuels d'alignement.

Dans l'enquête de 1273 à Lyon, on précise que dans le cas où un citoyen de la ville souhaitait construire de nouveau ou en augmentation d'un édifice existant, il devait en faire la demande à l'archevêque, comte de Lyon, ou à son *correarius*, et, en cas d'autorisation, payer un cens et disposer d'une copie de l'acte d'alignement. Les alignements étaient donnés

sur place, comme en témoigne un acte de 1320, fait devant la maison concernée¹⁴. Le nom de l'agent de l'archevêque chargé des alignements à Lyon, un "courroyer"¹⁵, nous renseigne sur l'outil principal de sa fonction, une courroie, ou corde, qui servait à déterminer sur le terrain l'emplacement de la façade du bâtiment à construire. L'usage de la corde est connu ailleurs, ainsi en Italie à Sienne en 1222, ou à Florence, où elle était utilisée pour implanter des rues nouvelles au XIII^e siècle¹⁶. Les modalités techniques de placement de la corde, cependant, ne sont pas bien explicitées dans les sources médiévales. Dans le cas de rues à Florence, on s'appuie sur des édifices existants. Dans la mesure où l'alignement visait à faire respecter l'espace public, et à conserver à la rue sa régularité, il est très probable que, comme à l'époque moderne, on plaçait les extrémités du cordeau aux angles des maisons voisines du terrain à construire, déterminant ainsi une droite sur toute sa façade, du moins dans les cas les plus fréquents¹⁷.

Le respect de l'espace de la rue et l'efficacité des règlements et des procédures adoptés dans ce but a souvent été mis en doute¹⁸. S'il est difficile d'en juger pour ce qui est des aménagements adventices, auvents, escaliers extérieurs, etc., dont nous n'avons de manière générale pas d'attestation archéologique, il est toutefois possible de juger de l'alignement des rues. Un certain nombre de fouilles en milieu urbain montre une grande fixité de l'emplacement du front des maisons le long des rues, du moins pour une période commençant au XII^e-XIII^e siècle, la documentation étant, pour l'instant, pratiquement absente pour l'époque antérieure (du moins en France en milieu urbain). A Lyon, les façades des maisons de la rue Buisson n'ont pratiquement pas changé d'alignement entre le XIII^e siècle et l'époque moderne, ou de timides reculs interviennent en vue d'un élargissement progressif de la voie. Au moins depuis le XIII^e siècle, ici, l'alignement a été conservé dans les reconstructions, par le biais des autorisations données par l'auto-

⁶ LEYTE 1996, 423.

⁷ Archives Nationales L 850 (actes).

⁸ Texte cité par HAROUËL J.-L., *L'embellissement des villes*, Picard, Paris, 1993, 199, note 2.

⁹ *Cartulaire municipal de Lyon*, éd. GUIGUE M. C., Lyon, 1875, appendice n° 4, 380-403.

¹⁰ MORTET & DESCHAMPS 1995, p. 940.

¹¹ MORTET & DESCHAMPS 1995, pp. 954-55.

¹² LEYTE 1996, 421. G. Leyte parle d'une présence de l'alignement dans "la presque totalité des statuts municipaux", donnant pour exemple Douai, Saint-Flour, Arras, sans cependant préciser les dates des textes qu'il utilise comme sources, p. 423.

¹³ Dans les archives des villes que nous avons dépouillées de manière systématique pour la période antérieure à 1300, à savoir

Rouen, Lyon et quelques villes de Normandie, un seul acte d'alignement a été rencontré, à Lyon, mais la réalité de la procédure est attestée par ailleurs.

¹⁴ "Actum Lugduni in vico publico ante dictam domum", *Cartulaire municipal de Lyon*, 1875, 446-48, appendice n° 23.

¹⁵ Dans le vocabulaire de périodes plus récentes, le *correarius* est un *voyer*.

¹⁶ GUIDONI 1989, 347 pour Sienne; HEERS 1990, 356, pour Florence à la fin du XIII^e siècle.

¹⁷ C'est la procédure suivie par les agents des Bureaux des Finances, créés au XVI^e siècle, en charge à partir de cette époque de la procédure d'alignement dans bon nombre de villes françaises.

¹⁸ HEERS 1990, 352-53; LEGUAY 1984, 32 s.

rité comtale¹⁹. Une telle persistance de l'alignement est attestée depuis la fin du XII^e siècle pour un certain nombre de maisons à Freiburg-im-Breisgau, dans le sud de l'Allemagne²⁰. A Rouen, nous connaissons des maisons des XII^e et XIII^e siècles dont les façades étaient au même alignement que celles de leurs voisines modernes, et un quartier créé vers 1240 a conservé des rues d'une largeur définie à l'origine, et donc l'alignement des maisons alors fixé²¹. Nous pourrions multiplier à l'envi les illustrations de ce phénomène, d'autant que les attestations d'une réalité différente, comme le désordre de l'alignement des façades, paraissent rares, et ne concerner que des voiries mineures. La parfaite continuité des façades des maisons les plus anciennes avec l'alignement des maisons voisines, dans la plupart des agglomérations, montre que, dans l'ensemble, et sauf cas particuliers, la limite entre l'espace privé de la parcelle bâtie et l'espace public de la rue y a été respectée. Dans ces exemples, et il semble que ce soit le cas de la plupart des villes, les règlements et procédures de contrôle de la voirie ont donc été efficaces. La marge d'empiètement sur l'espace de la voirie doit être, en conséquence, limitée assez strictement à l'élévation des bâtiments, et non à leur implantation²². Elle a pu concerner aussi des espaces à l'origine privés, dont l'urbanisation n'a pu être contrôlée par une autorité urbaine²³.

Les encorbellements

Du point de vue de l'élévation des façades, nous disposons aussi, bien qu'en moins grand nombre, d'un certain nombre de clauses incluses dans des coutumes, qui prescrivent des dimensions précises. A Toulouse, en 1286, on fixe la saillie de l'étage sur la rue à une palme, soit environ 25 centimètres²⁴. A Bayonne, à l'extrême fin du XIII^e siècle, on interdit de construire les étages à plus de deux aunes au dessus de la rue²⁵. A Amiens, dans le courant du XIV^e siècle, la saillie

est limité à 1 pied pour le premier étage²⁶. Il est cependant beaucoup plus difficile de juger de l'efficacité de tels règlements que pour l'alignement, du fait de la rareté des constructions civiles de cette époque conservées. On peut constater toutefois dans des villes comme Chartres ou Rouen, pour des maisons plus tardives des XV-XVI^e siècles, une extrême régularité de la dimension des encorbellements, comparable à celle autorisée dans les règlements de Toulouse et d'Amiens, et même, en particulier à Rouen, une variation très faible des hauteurs des rez-de-chaussée et des étages, qui semblent avoir été à cette époque fixées de façon uniforme à 3,20-3,30 mètres, soit sensiblement 10 pieds. Une telle constance peut s'expliquer, au moins en partie, par une production en série de maisons dans une époque d'intense activité immobilière. A Rouen, cependant, si l'on examine les quelques maisons dont la façade du XIV^e siècle nous soit parvenue ou connue par l'iconographie, la dimension de la saillie des encorbellements pourrait déjà avoir été fixée dans le courant du XIV^e siècle²⁷. De sorte qu'on est conduit à supposer, dans cette ville, une réglementation touchant les saillies comparable à celles de Toulouse et d'Amiens, et peut-être aussi ancienne.

La largeur des rues

Il est évident que ces règles ne touchent que les constructions nouvelles. Il en va de même pour la dimension des rues. Pour celles-ci, les textes nous renseignent sur des largeurs à respecter en cas d'établissement d'une voirie nouvelle. C'est particulièrement le cas à Avignon, où après le siège de 1243, un certain nombre de prescriptions d'urbanisme sont édictées. Ici, plutôt que de voies nouvelles, il s'agit de voies à recalibrer du fait des destructions dues au siège, et d'empiètements intervenus dans les années qui le suivirent, dans un contexte de périphérie urbaine²⁸.

¹⁹ ARLAUD C. et al., Un quartier d'habitation avant les transformations du Second Empire, in: *De la rue Impériale à la rue de la République*, Dossiers des Archives Municipales de Lyon n° 2, Lyon, 1991, 21s.

²⁰ HAUMANN H. & SCHADEK H., *Geschichte der Stadt Freiburg*, I, Theiss, Stuttgart, 1996, voir notamment le plan p. 101

²¹ GAUTHIEZ B., Les maisons de Rouen XII^e-XVIII^e siècles, *Archéologie médiévale* XXIII, 1993; GAUTHIEZ B., Le quartier Saint-Nicaise à Rouen, une 'opération d'urbanisme' du XIII^e siècle ?, *Monuments rouennais*, oct. 1988-sept. 1989, 34-35.

²² Dans le cas du quartier Saint-Nicaise à Rouen, créé vers 1240, on constate une légère fluctuation des alignements, réduisant parfois de quelques décimètres l'emprise de la voirie. On ne cependant s'il s'agit d'empiètements, ou d'un défaut

d'implantation des façades à l'origine. Cette dernière explication semble la plus vraisemblable, du fait de la propension, largement attestée pour des périodes plus tardives, à donner l'alignement sur la ligne des fondations antérieurement en place, GAUTHIEZ 1993, 131-217.

²³ Le contrôle de l'alignement, une fois un front de façades en place le long d'une voie, peut bien sûr intervenir aussi sur des voies dont le tracé est irrégulier, et le figer dans cet état.

²⁴ MORTET & DESCHAMPS 1995, 940.

²⁵ MORTET & DESCHAMPS 1995, 954.

²⁶ LAVEDAN P. et HUGUENEY J., *L'urbanisme au Moyen Age*, Droz, Genève-Paris, 1974, 147.

²⁷ GAUTHIEZ 1993, 225-26.

²⁸ MORTET et DESCHAMPS 1995, 265-68.

On sait aussi que les créations urbaines nouvelles, surtout à partir du milieu du XIII^e siècle, ont fait souvent l'objet d'une stricte planification. Le respect des alignements mis en place dans les urbanisations nouvelles jusqu'à nos jours, et donc la transmission fidèle du plan des rues, permet encore d'en constater la régularité de la planification. Seul un contrôle effectif, et attentif, des alignements des reconstructions et édifications nouvelles, au cours des siècles, peut expliquer une telle permanence des tracés des voies.

Les mentions d'intervention de l'autorité publique dans le maintien de largeurs imparties sont rares pour le XIII^e siècle. On voit par exemple le bailli de Rouen intervenir en 1240 pour que la largeur de rues proches de l'abbaye Saint-Ouen, rues aménagées ou réaménagées vers 1220, soit conservée à 20 pieds (6,50 m.)²⁹.

Ce contrôle de l'espace des rues et des alignements, justifié par la conservation du domaine public, royal ou seigneurial, et l'utilité publique (expression souvent employée), est assortie, en certains cas, d'une exigence de qualité de réalisation et de qualité esthétique.

Les textes les plus anciens dans lesquels nous avons rencontré une exigence de qualité de réalisation sont du début du XIII^e siècle. Ainsi, en 1224, le roi autorise l'élargissement des quais de Rouen en gagnant sur la rive de la Seine, sous le contrôle du bailli, son représentant sur place, et sous réserve que cela soit fait *competenter*³⁰. Le plan du secteur, dans son état de la fin du XVIII^e siècle, montre en cet endroit de la ville un parcellaire de lotissement régulier³¹. En 1226, à Lyon, l'abbaye d'Ainay autorise les Frères du Pont du Rhône à édifier des maisons sur la rive du fleuve, à condition que *via competenter relinquatur inter dictas terras et Rodanum*³². Le sens premier du mot *competenter* est bien sûr "de manière compétente". Mais, pour un aménagement urbain comprenant une ou plusieurs rues, il peut aussi concerner leur largeur, leur tracé rectiligne, ou même signifier "suivant les règles de l'art". Quelque soit l'exigence que recouvre ce mot, son emploi témoigne d'un savoir-faire identifié en la matière, et d'une technicité de l'aménagement urbain. Les textes, malheureusement, interdisent d'en dire plus.

L'esthétique

Du point de vue de l'esthétique, la régularité des alignements, et plus encore des encorbellements, que nous avons signalée, n'a probablement pas pour seule explication la facilité d'usage des voies. Les actes conservés, toutefois, sont pratiquement muets sur cet aspect des choses³³. Mais ils utilisent parfois le terme *compositio*, dans un sens qui ne peut être celui d'"accord" ou de "traité de paix". Dans le texte de 1240 déjà cité et relatif à Rouen, on se réfère à la *compositio* d'origine des rues dont la largeur doit être conservée. De manière plus explicite, certains alignements ont pu faire l'objet d'une expertise visant à répondre à des circonstances particulières. Pour une maison de Lyon, en 1320, on fait ainsi appel au maître d'oeuvre de la cathédrale Saint-Jean pour déterminer un alignement particulièrement délicat. C'est donc, dans ce cas, à l'architecte exerçant les plus hautes fonctions, considéré comme le plus *expert*, qu'on fait appel, du fait d'une décision trop difficile à prendre pour le voyer. C'est ici certes la difficulté technique qui impose ce recours, mais aussi la compétence du maître d'oeuvre de Saint-Jean à résoudre une question d'ordre esthétique. Plus tard, en 1402, dans la ville de Louviers, non loin de Rouen, on détermine un alignement fortement différent de l'ancienne implantation de la façade, pour la raison que *laquelle edification pourrait estre faite sans lesion du chemin et du bien publique, mais en seroit la ville grandement decorée et adournée*³⁴.

Moins encore que pour les alignements ou les saillies des étages, il n'est possible d'évaluer l'effet de ces décisions d'aménagement de l'espace touchant à l'esthétique. On peut certes en juger un peu pour les rues et les réseaux de rues dont les arrangements ont été "composés", mais les maisons qui ont fait l'objet des actes que nous mentionnons ont disparu. Il est cependant possible que l'harmonie que l'on peut parfois ressentir dans certains quartiers constitués d'architectures anciennes soit l'effet de dispositifs réglementaires et de décisions d'aménagement telles que ceux que nous venons évoquer. La forme souvent relativement régulière des paysages bâtis anciens, médiévaux lorsqu'ils subsistent, serait alors le fruit de décisions en ce sens, et nous avons vu qu'elles avaient été présentes, et effectives, dans un certain nombre de villes médiévales en France, et non pas la

²⁹ Archives départementales de la Seine-Maritime, 14 H 179.

³⁰ Bibliothèque municipale de Rouen, Tiroir 63, vidimus de 1279.

³¹ GAUTHIEZ 1991, 218-21.

³² GAUTHIEZ B., La topographie de Lyon au Moyen Age,

Archeologie du Midi médiéval 12, 1994, 12.

³³ Du moins en France. Il en va différemment pour l'Italie, où les textes en ce sens sont plus nombreux dès le XIII^e siècle, voir GUIDONI 1989.

³⁴ BONNIN, II, 1871, n° CCCCXVI.

conséquence d'un quelconque effet de société, ou l'illustration d'une homogénéité culturelle, pour ne pas parler du hasard.

Le tableau que nous venons de brosser n'est qu'une esquisse. Il faudra réunir d'autres textes, repérer d'autres cas où il serait possible de croiser des sources écrites avec des données archéologiques, multiplier les enquêtes monographiques, pour le compléter, et le reprendre, voire le modifier. Cependant, les informations disponibles permettent de reposer dès maintenant la question du développement des pratiques urbanistiques médiévales.

Elles sont en place, en France, dans l'ensemble, et pratiquement sous tous les aspects envisagés ici – alignements, fonctionnalité, encorbellements, auxquels nous pouvons ajouter l'esthétique, au XIV^e siècle. Les textes sont alors assez nombreux pour qu'on puisse en avoir une certitude raisonnable. Ils semblent dessiner une mise en place progressive dans le courant du XIII^e siècle, en concernant tout d'abord les alignements, puis poursuivant par le contrôle du gabarit des rues nouvelles, enfin aboutissant à un contrôle de l'espace construit dans les caractéristiques volumétriques de son élévation. On assiste ainsi à une complexification progressive des règlements, et à une extension des prérogatives municipales quand à l'aménagement de l'espace. Le Moyen Age a donc probablement connu dès le XIII^e siècle un urbanisme voisin dans ses modalités de celui que les documents nous décrivent pour le XVI^e siècle. Il ne semble pas, de ce point de vue, que la Renaissance ait apporté, en France, des pratiques très nouvelles³⁵.

L'émergence de cet urbanisme, qui semble, d'après les sources, présent aussi bien au nord de la France qu'au sud, et s'y développer à la même époque suivant des modalités comparables, pose plusieurs questions³⁶.

Tout d'abord, quel est son lien avec le processus d'urbanisation, et surtout de densification urbaine, qui

touche les villes à cette époque? Franz Verhaeghe a fait il y a quelque temps un premier bilan de ce qu'on sait de l'évolution des structures d'habitat dans l'Europe du Nord-Ouest. Il conclut sur une importante modification de l'espace civil des villes dans le courant des XI-XII^e siècles, sous l'effet en particulier de la diffusion d'un type de maison spécifiquement urbain, disposé le long de la rue, et d'une densification du bâti, à la fois en fond de parcelle et le long de la voirie³⁷. Le phénomène a connu des variations régionales et dans le temps. Ainsi, le parcellaire de certaines villes comme York, capitale d'un royaume Viking en Angleterre, s'est fixé dans certains secteurs dès le Xe siècle, et n'a que peut été modifié jusqu'à nos jours, du moins jusqu'au XIX^e siècle³⁸, alors qu'à l'opposé à Schleswig, dans le nord de l'Allemagne, un bouleversement profond du découpage foncier et de l'occupation urbaine est intervenu au début du XIII^e siècle³⁹. Dans l'ensemble, "les données suggèrent ... que (l'espace civil) devienne graduellement plus important dès le IX^e-Xe siècle et qu'il commence même à prendre le dessus à partir du XII^e siècle"⁴⁰.

On ne peut être que frappé par la continuité chronologique entre l'affirmation progressive de l'espace civil privé et, ensuite, le développement de pratiques urbanistiques de plus en plus codifiées. Une relation entre ces deux phénomènes peut être supposée. L'accroissement du contrôle urbanistique sur l'espace public, principalement celui de la voirie, serait en quelque sorte une contrepartie de la limitation de l'exercice du pouvoir spatial de l'autorité royale, seigneuriale, plus tard communale⁴¹. A l'affirmation des prérogatives des habitants des villes sur les parcelles privées, qui est allée jusqu'à l'affranchissement de la seigneurie éminente du sol dans certains cas⁴², correspondrait donc l'affirmation des exigences de l'autorité sur l'espace public⁴³.

³⁵ Il en va de même probablement en Italie, tant les passages relatifs à la ville de Leon-Battista Alberti, auteur d'un traité *Les Dix livres d'architectures* vers le milieu du XV^e siècle, et consacrés en particulier à ce qu'il nomme la *collocatio*, ou l'art de placer un bâtiment nouveau dans un cadre urbain (*L'architettura*, éd. BONELLI R. & PORTOGHESI P., Il Polifilo, Milan, 1966, T. I, p. 174, T. II, 814, 836-38) paraissent inspirés par les pratiques que nous venons de décrire, par ailleurs abondamment illustrées dans les villes du Moyen Age de la péninsule.

³⁶ Enrico décrit une situation très comparable pour l'Italie, GUIDONI 1989, 321-28 et 332 s.

³⁷ VERHAEGHE F., L'espace civil et la ville, in: *Archéologie des villes dans le Nord-Ouest de l'Europe (VII^e-XIII^e siècle). Actes du IV^e congrès d'archéologie médiévale, Douai 1991*, Société d'Archéologie Médiévale, Douai, 1994, 145-90.

³⁸ HALL R., Viking-age York - an introductory survey, in: *Les mondes normands (VIII^e-XII^e s.), Actes du II^e congrès d'archéologie médiévale, Caen 1987*, éd. GALINIÉ H., 1991, 90-91.

³⁹ VOGEL V., De Haithabu à Schleswig, in: *Archéologie des villes dans l'Europe du Nord-Ouest*, 1994, 22-26.

⁴⁰ VERHAEGHE 1994, 173.

⁴¹ Même si, bien sûr, un droit d'expropriation pour des ouvrages d'utilité publique, comme des enceintes militaires ou des places, est pratiquement partout présent.

⁴² Ce fut particulièrement le cas de villes flamandes, mais aussi probablement d'autres villes, comme Rouen; GAUTHIEZ B., La forme des immeubles et le statut juridique des terrains: l'exemple de Rouen du XIII^e au XVIII^e siècle, in: *Le sol et l'immeuble*, dir. Faon O. & Hubert J., Ecole française de Rome, coll. n° 206, Rome, 1995, pp. 268-69.

⁴³ Il serait donc illusoire de chercher des manifestations écrites de pratiques urbanistiques comparables à celles du XIII^e siècle dans les sources antérieures (en particulier avant le XII^e siècle), les pratiques ayant changé, de même le rapport entre le seigneur du sol urbain, représentant de la chose publique, et les habitants, dont l'autonomie s'est accrue.

Cette perspective permet d'esquisser le lien entre espace construit, l'évolution sociale, et l'apparition d'un droit et de pratiques urbanistiques codifiés. Cependant, la question de l'existence de telles pratiques antérieurement au XIII^e siècle reste posée, de même celle d'un droit. Un tel droit concernant l'espace public des villes est d'ailleurs souvent évoqué lorsque les statuts urbains sont établis. Ainsi, il s'agit parfois précisément de *coutumes*. A Lyon, lors de l'enquête de 1273, il est précisé que la pratique de l'alignement existe "depuis si longtemps qu'on ne se rappelle plus quand". En fait le contrôle de l'espace de la voirie existait très vraisemblablement, en général, depuis longtemps lorsque les textes qui nous en font part ont été établis⁴⁴. En témoignent, d'ailleurs, pour le XII^e siècle, les maisons de cette époque connues par l'archéologie ou par l'iconographie, à Chartres, Cluny, Saint-Gilles, et bien d'autres villes⁴⁵. Les façades de ces maisons sont au même alignement que celles de leurs voisines, et montrent la conservation de la limite entre espace privé et espace public.

Pour les périodes antérieures, il est possible que les prérogatives de l'autorité royale ou seigneuriale aient été telles qu'elle ait pu décider et mener à bien un remodelage de l'espace affecté aux habitants, un espace qui ne serait pas encore tout à fait "privé". Le remodelage de Schleswig au début du XIII^e siècle serait l'une des dernières manifestations d'une telle possibilité, dont témoignent aussi peut-être une cer-

taine mouvance de l'occupation urbaine au haut Moyen-Age, et, dans certains cas comme Hamwic, son étroite dépendance, et probablement aussi celle des habitants, d'une autorité donnée⁴⁶.

En conclusion, la connaissance du droit de l'urbanisme, et des pratiques associées, gagne à être envisagée à la fois du point de vue des textes, et sous l'angle de l'archéologie, celle des rues et places, et celle du bâti, principalement des façades, enfin sous l'aspect du droit des sols et de l'organisation juridique de la société, en particulier des prérogatives respectives des occupants des parcelles privées et de l'autorité publique. Le bilan des données relatives à ces différents aspects n'est pas très encourageant: les sources écrites sont peu nombreuses, éparpillées, et l'archéologie des espaces publics, en particulier des rues, encore peu développée, du moins en France. Cependant, on ne peut plus se suffire d'une description de l'urbanisme au Moyen-Age comme celle d'un droit le plus souvent non effectif et de pratiques épisodiques. Les informations disponibles, qu'elles soient nouvelles ou anciennes, en incluant les données issues de l'archéologie, plaident en fait pour une présence ancienne et répandue, et montrent un développement remarquable des règlements et de procédures efficaces à partir de la fin du XII^e siècle, et surtout dans le courant du XIII^e siècle, dans un nombre important de villes françaises⁴⁷.

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⁴⁴ Il est possible, comme le propose Jean-Pierre Leguay (LEGUAY 1984, 33 s.), qui s'appuie sur des données concernant en particulier la Bretagne, que le contrôle ait pu être moins présent dans les petites villes. Les différences régionales, de ce point de vue, ont pu être importantes. L'examen des plans des agglomérations normandes laisse supposer cependant, dans cette région, un contrôle très présent.

⁴⁵ Sur des maisons du XII^e siècle, voir notamment GARRIGOU-GRANDCHAMP P., *Demeures médiévales*, Rempart/Desclée de Brouwer, 1992.

⁴⁶ BRISBANE M., Hamwic, Saxon Southampton, in: *Archéologie des villes dans l'Europe du Nord-Ouest*, 1994, 27-33.

⁴⁷ Il y a cependant des exceptions, comme Lille: BLIECK G. & GUIFFRAY A., Genèse et évolution d'une place publique, l'exemple de Lille, in: *Archéologie des villes dans l'Europe du Nord-Ouest*, 1994, 207-224.

Keith D. Lilley

Colonialism and Urbanism in High Medieval Europe: identifying morphologies of urban change

Introduction

There exists an intimate and long-standing relationship between urbanism and colonialism. The purpose of this paper is to show how, in high medieval Europe, urban spaces were physically shaped for and by aristocratic elites in order to help them conquer, consolidate and colonise newly-acquired territories. Two main points will be made: first, that the design of certain medieval towns reflects the colonial intentions of their founders; second, that changing town-designs, or urban morphologies, may be read as a contested discourse of 'medieval colonialism'. To this end, the paper is divided into four sections, starting with some introductory remarks about the nature of colonialism and its relationship to urban process, and the prospect of understanding this relationship within the context of territorial expansion in medieval Europe. Following this, the problems of representing, or mapping, medieval urban landscapes will be discussed and a technique for identifying morphologies of urban change outlined. The main part of the paper then uses this morphological approach to focus on changes in town-design across England, Wales and Ireland in the period between the eleventh and thirteenth centuries. It is in this temporal and spatial context that the relationship between urbanism and colonialism shall be explored, using specific examples of towns which are known to have been developed as part of a broader pattern of internal and external territorial expansion by Anglo-Norman aristocracies.

Linking Medieval Colonialism and Urbanism

Although scholars have long recognised that towns can be used by cultural elites to secure territorial control, research specifically addressing the relationship between urbanism and colonialism has tended to focus on the European colonisations of the American, African and Asian continents, which took place between the sixteenth and twentieth centuries (for

example, AlSayyad 1992; King 1990). This 'post-colonial' literature has largely failed to engage with ideas about the pre-modern antecedents of such expansionism, of what medievalists have called 'feudal empires' (Le Patourel 1984). At the same time, the few historians who have worked on aspects of such medieval colonialism have failed to take-on ideas put forward by urban geographers and sociologists about how the design and building of towns gave colonising hegemonies control over territories and dominance over subjugated people. In this sense, there is an opportunity to use the ideas and techniques of geographers and urban theorists to help understand historical issues relating to the colonial role of towns in medieval Europe.

A framework for studying colonialism, and the particular role played by urbanism in the colonial process, has been put forward by Anthony King, a sociologist and cultural historian (King 1976; 1990). His framework is useful for trying to understand colonialism in a medieval context, since King adopts a very broad sense of what characterises 'colonialism'. He identifies colonialism in terms of 'three main characteristics: 1) that power (economic, political and social) is principally in the hands of a non-indigenous minority; 2) that this minority is superior in terms of military, technological and economic resources – and, as a result, in terms of social organisation; and 3) that the colonised majority are racially (or ethnically), culturally, and religiously different from the colonisers' (quoted in Al Sayyad 1992, 4). The territorial changes which occurred in high medieval Europe can easily be conceptualised in these broad terms, particularly those colonisations associated with what has been called 'the aristocratic diaspora' of migrant lords across the continent in the period 1050-1350, which included the geographical spread of Norman aristocracies into Britain and Ireland, as well as into Sicily and Antioch (Bartlett 1993; Davis 1976).

The Norman conquest and colonisation of England and Wales, and the subsequent English control of Ireland, took place in the period between the late-

eleventh and early-thirteenth centuries. This particular 'diaspora', or diffusion, can be seen as part of a broader, 'colonial' process if it is viewed using the characteristics set out by King (1990): first, Norman magnate lords were initially a non-indigenous minority who held (contested) power over English, Welsh and, later, Irish subjects (Chibnall 1985; Davies 1987; Flanagan 1989); second, the military success of Norman lords relied on technological innovation, such as castle-building, as well as social and tenurial reorganisation (Higham & Barker 1992; Faith 1997); and third, social and cultural 'difference' between Norman, English, Welsh and Irish people was perpetuated in contemporary accounts and chronicles, most clearly in Gerald of Wales' 'descriptions' of Wales and Ireland (written in the early-twelfth century), to legitimate Norman colonisation and settlement (Davies 1990). Of course, the idea that there was a burgeoning 'Norman empire' in eleventh- and twelfth-century Europe is not at all a new one; this phrase was used by Charles Homer Haskins as long ago as 1915, and subsequently it was adopted as the title of a book by Jean Le Patourel (Haskins 1915; Le Patourel 1976). Generally, though, there has been reluctance amongst medievalists to see the Norman aristocracy's blatant attempts at territorial expansion, and the expansionist activities of other aristocratic elites in high medieval Europe, as 'colonial'.

One of the few historians to think about not only the colonial character of territorial change in the European Middle Ages, but also the role of urbanisation in this process, is Robert Bartlett. In his book, the *Making of Europe*, Bartlett identifies two processes of territorial expansion, one he defines as 'internal', associated with the intensification of settlement, and the other 'external', associated with the pushing-out of political frontiers (Bartlett 1993, 2). In essence, then, it is possible to see colonisation as a process of territorial expansion affecting 'interior' regions as well as 'frontier' regions. In the Middle Ages, the political and geographical expansion of territories was helped along both by the development of new towns and the extension of old ones (Beresford 1967; Benevolo 1993; Friedman 1988). For Bartlett, the role of town (re)foundations in this colonial process is represented in the proliferation of new urban laws and charters, and to demonstrate this he uses examples of towns which were linked together by 'families of urban law' (Bartlett 1993, 172-7). Like most historians, therefore, Bartlett 'maps' the process of European urbanisation and colonisation from written records, and does not consider in depth the importance of material changes that were taking place on the ground, less so the way that urban spaces were created to help control local population. Indeed, the

politicised nature of town-design is rarely recognised by medievalists. This is a shame because urban form reflects the social and cultural modes of its production (Lefebvre 1991), and may thus be read as 'text' to help reveal social and spatial practices in different historical contexts that were often not written down and documented, or, if they were, became lost over time (Duncan 1990).

Perhaps one reason why medievalists rarely connect the shaping of urban spaces with processes of territorial control is because it is so difficult to represent, or map, medieval urban landscapes from contemporary sources. Actually, this problem of representation reflects a broader issue concerning the continued dominance of the written record in the writing of urban histories and archaeologies. One British archaeologist has called this state-of-affairs the 'tyranny of the historical record' (Austin 1990). If we are to understand the role of towns and town-design in the colonial control of newly-acquired territories in medieval Europe, alternative 'narratives' of urban change are required which relies less on the survival and availability of written records. An approach yet to be used in this context uses the morphological analysis of town-plans to map changes in medieval urban form. Since the ideas and interpretations put forward in the rest of this paper depend on this particular methodological approach some explanation of it is offered here.

Identifying Morphologies of Urban Change

The principal difficulty in representing medieval urban landscapes lies in their remoteness from the present-day. Physical reminders of medieval townscapes are less immediately visible to modern eyes than are the panoply of buildings and civic spaces left over from more recent periods of European history. To overcome the effect of this 'temporal-distancing', it is necessary to adopt interdisciplinary sources and techniques to re-present the built form of medieval towns and cities.

The process of mapping medieval urban landscapes is hindered by the relative lack of contemporary planning treatises or other such accounts for the period between the late-eleventh and early-thirteenth centuries, which could otherwise tell us how and why aristocratic elites were laying out their new towns. Rare, too, are visual and graphic representations of towns in the high Middle Ages. In England, the earliest plan to show part of a medieval city dates from the 1150s (Skelton & Harvey 1986). Similarly, there are few narrative descriptions of urban life that equal the 1180s account of London by

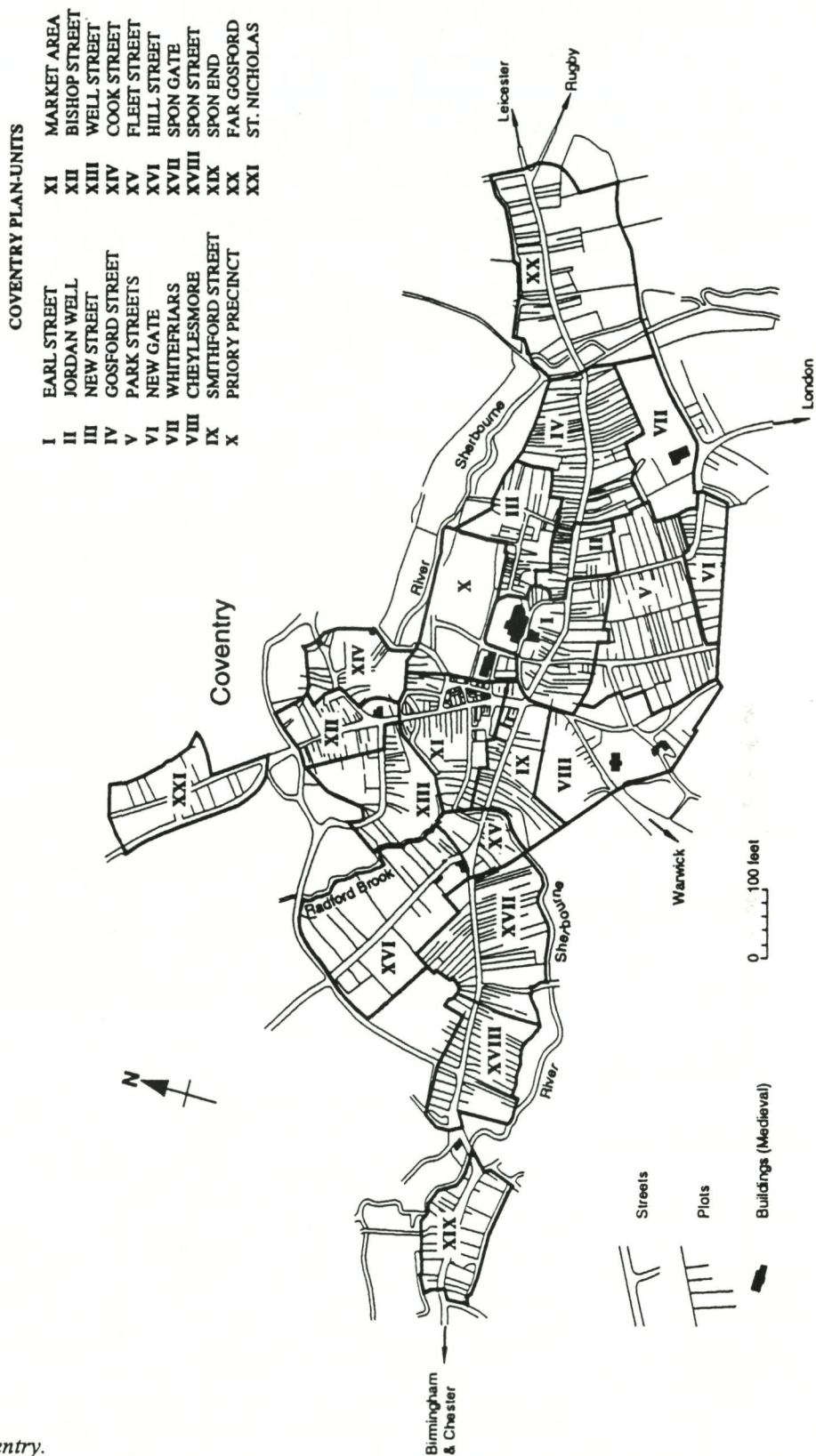


Fig. 1. - A Plan-analysis of Coventry.

fitzStephen (Kingsford 1908). For large towns and cities, such as Canterbury and Winchester, there are detailed records of urban estates and properties which in some cases have been brought together to form the basis of scholarly reconstructions of urban topographies for particular places and periods (Urry 1967; Keene 1985). On the whole, though, it is generally

difficult to map the changing designs of medieval towns from surviving contemporary records, especially before the thirteenth century, and especially for small towns. To solve this problem it is necessary to use more recent cartographic representations of towns and cities, and use these as a basis for identifying morphologies of urban change.

Over the past century, there have been numerous attempts at identifying and classifying medieval town-plans for the purpose of mapping geographies of urbanisation (for example, Dickinson 1951; Höenig 1927). This tradition reflects a tendency to reduce the forms of medieval towns to simplistic classifications, and most often distinctions are drawn between towns with 'regular' plans, classified as 'planned', and those with more complex plans, collectively labeled 'organic' (Schofield & Vince 1994). In effect, because it fails to recognise the physical and historical complexities of urban form, this classificatory approach silences the morphological histories of medieval towns. Instead, to identify temporal transitions in town-design, a *morphogenetic* approach is required, that neither confines or constrains interpretations of urban form. Moreover, a replicable and transferable methodological approach is needed to facilitate the comparative study of town-designs across different spatial and temporal contexts. One technique which meets these requirements is called town-plan analysis.

Following the pioneering work of M.R.G Conzen, town-plan analysis has been developed by geographers, and lately archaeologists, in Britain and in Ireland (Conzen 1960; 1988; Slater 1987; Baker & Slater 1992; Simms 1992). Plan-analysis is a sophisticated morphological approach that helps reveal successive and over-lapping phases of medieval urban development (see Lilley 1995; and below, Appendix) (Fig. 1). The technique relies on using early, detailed and

large-scale scientifically-surveyed cadastral plans, usually dating from the nineteenth century, to produce a town-plan on which other historical and archaeological information can be incorporated (Fig. 2). The key to the technique lies in recognising that all town-plans are composed of different configurations of plot-patterns and street-systems. By identifying these different configurations, one or more morphological regions, or plan-units, can be defined. In the case of Coventry, illustrated here, there are twenty-two such plan-units, each one representing a stage in the town's physical evolution between 1050 and 1350. Such plan-units provide the basis for discussing changes in the design of medieval towns, and for comparing the forms of different towns and parts of towns. Furthermore, because the plan-analysis technique is interdisciplinary, and uses town-plans as 'texts', its own particular narrative of urban history can be compared against others. Most importantly, each plan-analysis offers a much-needed 'window' on the physical changes shaping medieval towns.

Comparisons between the morphologies of towns can be used to show how the dynastic colonialism of medieval aristocracies was articulated through changing the designs of towns. All towns were designed using the same common language of streets and plots. What differs is the configuration of these plan-elements. The remaining part of this paper uses the plan-analysis approach to identify towns whose plans contain particular 'design-motifs'. In this respect, two design-motifs have been selected, both of which

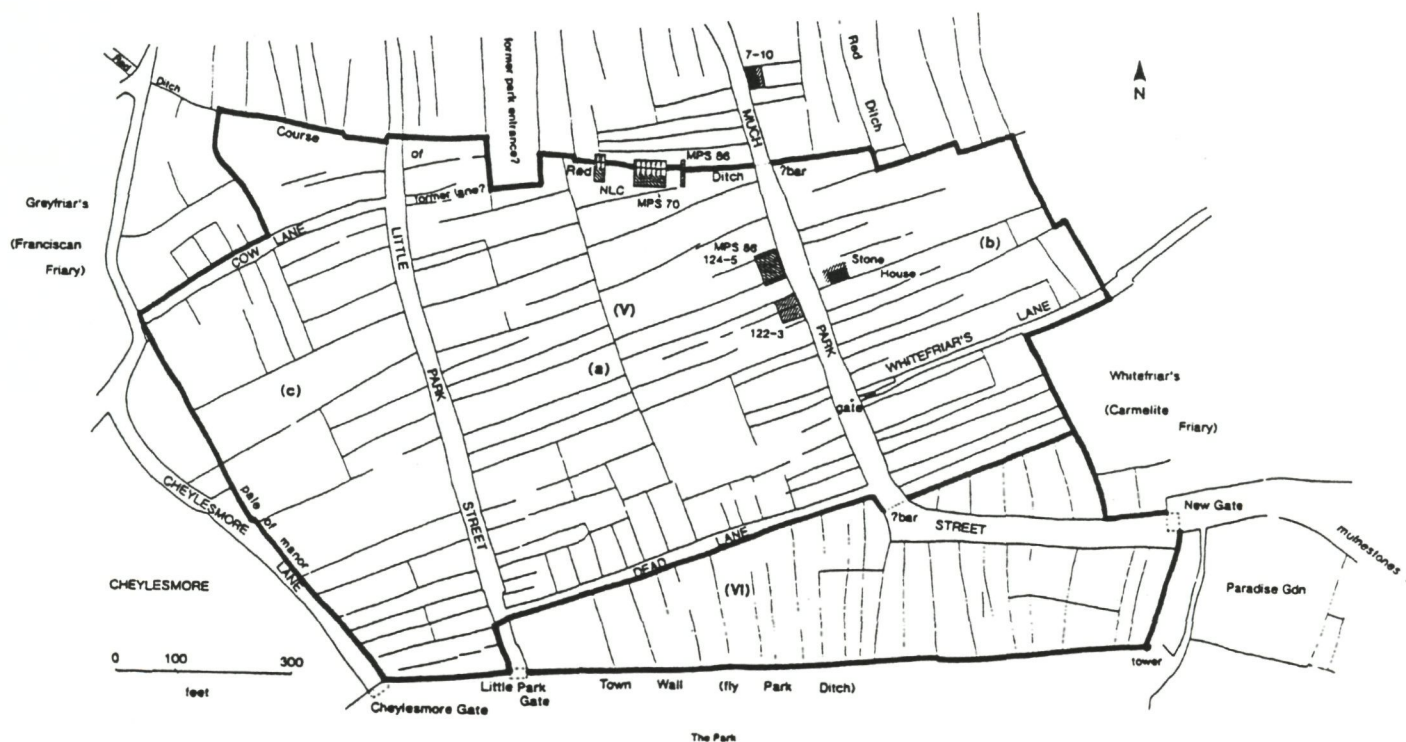


Fig. 2. - Park Streets, Coventry.

Fig. 3. - A Plan-analysis of Alnwick (based on Conzen 1960).

- I. Castle;
- II. Bailiffgate;
- III. Market Place;
- IV. Walkergate.



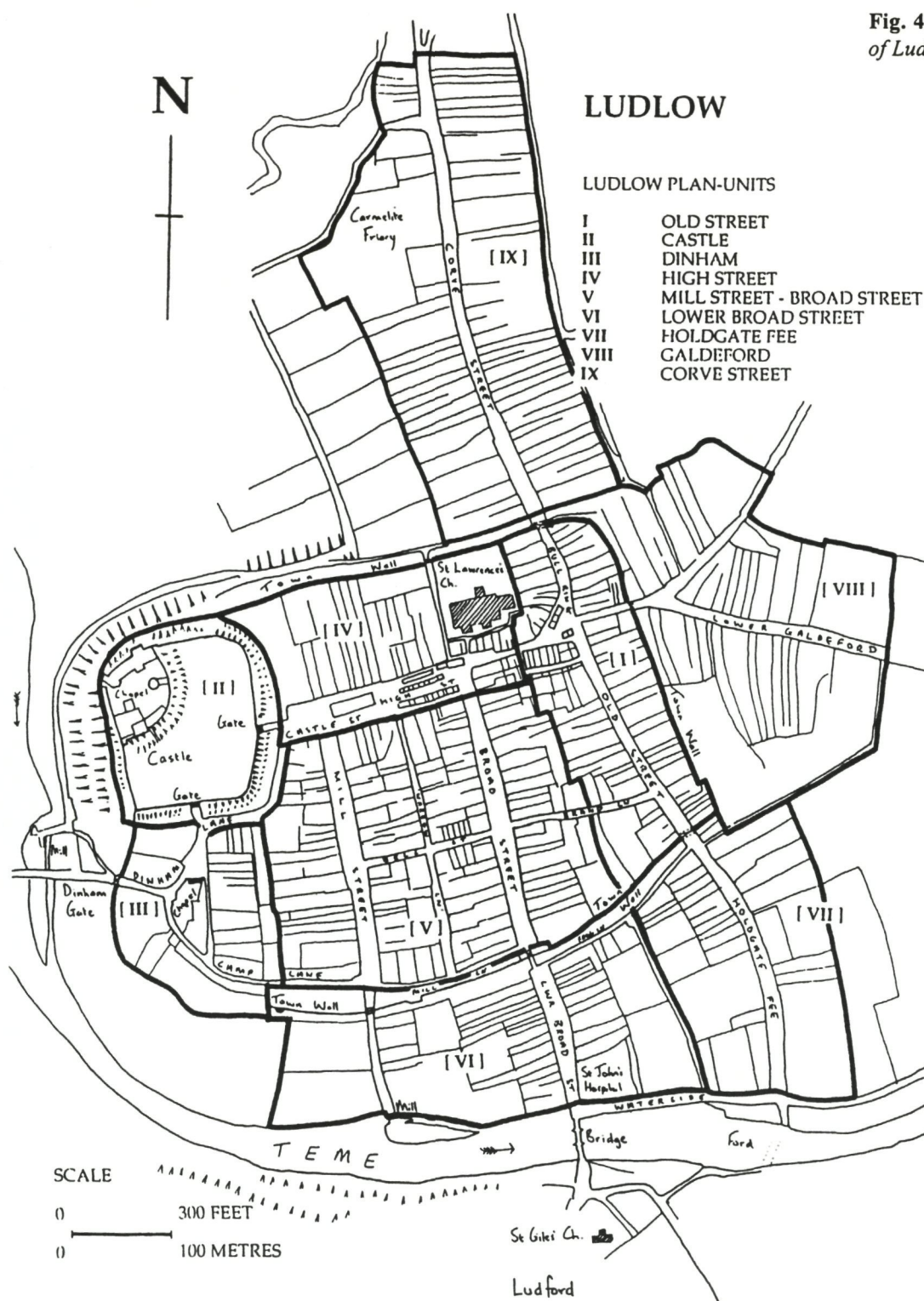
were commonly deployed throughout medieval Europe, although each belonged to specific temporal and spatial contexts. The first motif to be considered is the 'castle-town', which in eleventh- and twelfth-century England, Wales and Ireland appears to be linked to military conquests by Norman lords, and the early stages of territorial control. The second design motif to be considered here is the orthogonal-plan, which becomes more commonplace and gradually more sophisticated in the later-twelfth and early-thirteenth centuries, during a later period of interior and frontier Anglo-Norman colonisation. It will be argued below that these two motifs represent distinct changes in the interests and colonial intentions of the

town's founders, and that different town-designs were used to facilitate different stages in the expansion of aristocratic power in high medieval Europe.

Town Design and Military Conquest: The Castle Town

The design of the 'castle town' is morphologically simple and easy to identify. The main characteristics are a castle, a market place and a church. Often, these morphological features were actually arranged in that order, with the church and castle both separated by a straight street which functioned as the settlement's

Fig. 4. - A Plan-analysis of Ludlow.



market place. Along both sides of the main street lay plots. Such towns were established by aristocratic lords all across high medieval Europe. However, some scholars, following Pirenne, have rather obscured the colonial motives of those responsible for creating castle-towns by suggesting that such 'urban settlements... sprang up' in spontaneous fashion outside castle gates (Chibnall 1986, 148). To understand the political role of castle-towns more fully, examples from Anglo-Norman England, Wales and Ireland

will now be considered and compared. This will enable some common design-characteristics to be identified, as well as show that these towns were designed for specific purposes: to control newly-acquired lands and people.

On the basis of differences in the political and tenurial geography of high medieval England, a distinction can be drawn between 'frontier' regions in the north and west, commonly called marcher lands, and 'interior' regions to the south and east (Faith

1997). This division is useful for understanding the different purposes of castle-towns, as it helps place this particular town-design in its appropriate socio-political context. The Normans' perceptions of frontier regions are embodied in contemporary narrative accounts. Orderic Vitalis, writing in the 1120s and 1130s about events in the reign of William the Conqueror, refers to the king's activity in northern England, in Northumberland, as well as along the Welsh borderlands (Orderic II, 235). In Shropshire, for example, Orderic states how William's army 'feared the wildness of the region, the severity of the winter, the scarcity of the food and the terrible ferocity of the enemy' (in this case the English and the Welsh). This distinction between frontier and interior lands was therefore very much in the minds of Norman magnate lords as they sought to secure territorial control of England and Wales in the later-eleventh century. The activities and attitudes of these magnate lords can also be seen in the designs of their towns.

In Northumberland, Ivo de Vesci established a new castle at Alnwick, at the point where the great north road to Scotland crossed the River Alne, midway between Newcastle on Tyne and Berwick upon Tweed (Conzen 1960). At Alnwick, the gates of de Vesci's castle open onto a single broad street called Bailiffgate, which is fronted by two series of short, regular plots and extends as far as the church of St Michael (Fig. 3). Although the castle and Bailiffgate form two separate plan-units, their juxtaposition represents a unified design (plan-units I and II). Bailiffgate was designed for commerce, to accommodate a market, as its broad-width and rectilinear-shape both indicate. The street had also been diverted from an earlier course and realigned to focus on the castle, ensuring that traffic had to pass by the castle-gates. Bailiffgate thus became a closely controlled public space under the auspices of de Vesci, and the two plan-units, the castle and the market-street, show that he knew how much local political control relied on a partnership of defence and commerce. Similar partnerships are reflected in the plans of towns along the Welsh border, at Ludlow for example, where Roger de Lacy had built a castle in the 1080s (Wrightman 1966).

Ludlow lay on the route between Chester and Hereford, and de Lacy's castle was located on a spur overlooking a crossing of the River Teme (Conzen 1988). The castle gates originally opened to the south, into an area known as Dinham (Fig. 4). Although the area of the castle and Dinham are morphologically distinct, together they form a unified part of Ludlow's town-plan (plan-units II and III). As at Alnwick, these two areas, one containing a stronghold

and the other containing streets and plots, are juxtaposed yet morphologically integrated. The close link between the two areas is articulated by the relationship of the castle-gateway and the street outside (which descends steeply down to the river), as well as by the symmetrical arrangement of the two plan-units. The likelihood exists that the two plan-units were established at the same time, to complement each other, and the probable context for this is de Lacy's development of Ludlow castle in the 1080s. Another castle-town in Shropshire, which can be used to support the idea that Norman lords partnered castles and towns to secure newly-acquired territories, is Bridgnorth. In the 1090s, Robert de Belleme, a notorious Norman lord, moved the town of Quatford to a new site above the River Severn and so established his castle and new town of Bridgnorth (Orderic V, 225). In doing this, Belleme was borrowing from his previous experience as lord of lands along the southern frontier of Normandy (in Maine), where, so Orderic records, he had similarly transplanted a town called Vignats, and its people, to a new site closer to his castle at Fourches (*ibid.* IV, 229). This 'spatial practice', of uniting town and castle, was therefore widely used by magnate lords to help control frontier lands in late-eleventh century Normandy and England. Norman lords also used castle-towns to secure lands in south and west Wales in the late-eleventh and early-twelfth centuries.

Recent research has shown that the earliest Norman towns in Dyfed were closely tied to castles (Lilley 1996). The castle-towns at Haverfordwest, Pembroke, Carmarthen and Kidwelly, all bear design traits similar to the plans of Alnwick and Ludlow. The earliest part of Haverfordwest's town-plan, for example, is the castle and an adjoining small market place, situated high above the western Cleddau river and ringed by defences (this area is plan-unit I on Fig. 5). At Haverfordwest, as at Alnwick, the short, rectilinear market-street lay outside the castle gates and served as a place where the exchange of goods could easily be controlled and gatherings of people contained. The plots fronting the market place and the presence of a church situated opposite the castle-gates indicate that the settlement was designed to accommodate new settlers. Clearly, then, part of the general design of the 'castle-town' was to attract inhabitants, and in doing so reinforce Norman aristocratic rule over newly-acquired territories. This same approach was used by magnate lords in Ireland in the late-twelfth century, during the early stages of Anglo-Norman colonisation. At Drogheda, for instance, Hugh de Lacy established a castle on the south side of the River Boyne in Meath, sometime in the 1170s (see Bradley 1985; Dargan 1996). This castle was

Fig. 5. - A Plan-analysis of Haverfordwest.



accompanied by a new town. Using Drogheda's town-plan, it is possible to identify the outlines of a former castle bailey with streets and plots inside (Fig. 6). Under Walter de Lacy, this castle-town was soon extended by new series of plots, along the riverside for example (*ibid.*, 35-6). Taken together, these two areas of Drogheda's plan represent the de Lacys' early foothold on the east coast of Ireland.

In all, in frontier regions of Anglo-Norman territories, castle-towns were used by aristocratic lords during initial periods of conquest when it was necessary to secure political control by military force.

Although successful military occupation relied principally on castle-building, towns were also needed to help provide greater social cohesion and to sustain economic integration. By controlling neighbouring people and land, castle-towns defined areas of (contested) Norman (and English) control. However, castle-towns were established not only in 'frontier' contexts but in 'interior' regions too, in late-eleventh-century lowland England, for example.

In East Anglia, new castle-towns were established at Saffron Walden, Pleshey and at Chipping Ongar (Bassett 1981; RCHME Essex 2). Plans of these

towns show that in each case the castle was morphologically integrated with an adjacent area of streets and plots, and the town enclosed by an extension of the castle's defences. Similar defended towns were established in southern England, at Midhurst in Sussex and Ludgershall in Wiltshire, for example (see Lilley forthcoming; Haslam 1976). In view of the seaborne threats posed by Northumbrians and Danes in the late-eleventh century, it could be argued that the southern and eastern coasts of England were perceived by the Normans as frontier areas little different to Northumberland and Shropshire (see Chibnall 1986). Certainly, the presence of castle-towns in southern and central England can be linked to the creation of new tenurial geographies, and it is of note that castellated lordships and land-holdings were granted to members of the high Norman nobility who were themselves often marcher lords (see Warren Hollister 1987). In Sussex, the new castle-town at Midhurst was established in an outlying part of a large block of land centred on the castle and town of Arundel, all of which William I had granted to Roger de Montgomery, first Earl of Shrewsbury (Mason 1972). Elsewhere in England, castle-towns were the seats of newly-created honors granted to Norman magnates in the years following the conquest; Tonbridge (Kent), Clare (Norfolk), Pontefract (Yorkshire) and Tutbury (Staffordshire) were all towns developed in this way and common design-motifs in their plans testify to the widespread dualism of defence and commerce in interior regions of the early Norman kingdom (see Sanders 1960).

As well as creating new castle-towns, Norman lords were busy inserting them into the landscapes of already existing English towns. At Bristol, a castle was built soon after the conquest on the eastern side of the Anglo-Saxon town, across the narrow neck of a natural promontory between two rivers (Lobel & Carus Wilson 1975, 3-8). The castle forced the main road into Bristol onto a new alignment, and controlled road-traffic in and out of the town (it was effectively a cork in a bottle). The main castle-entrance did not open into Bristol's townscape however, but instead faced east. The eastern approach to the castle, now called Old Market, was laid out with streets and plots and the whole enclosed by defences which were linked to the castle's. This area of Old Market, together with the castle, represent a castle-town similar in design and purpose to those examples outlined above. It seems that the castle and market place were designed principally to stimulate new commercial activity away from the Anglo-Saxon urban core as well as to control access in to it. This reorientation was presumably a deliberate ploy to stamp Norman authority on Bristol's townspeople. A similar case

can be made for Nottingham, where it is well-known that a new Norman 'borough' was established before 1086 between the existing Anglo-Saxon *burh*, English Nottingham, and a new castle built under royal authority by William Peverel (Barley & Straw 1969, 2-3). A large market place was laid out, and streets and plots provided for new townspeople (this area still is the commercial core of the city). By inserting new castles and market places into Anglo-Saxon townscapes, it seems that the Normans were trying to spatially and socially marginalise English townspeople. This policy effectively 'suburbanised' already existing urban centres and so placed Norman lords in greater control of trade and people.

In lowland England, then, castle-towns were used to help secure newly-acquired lands during the years following the Norman conquest and the designs of these towns were similar to those established in frontier regions. Indeed, the following design-motifs are common to castle-towns in both frontier and interior regions: interlinked castle- and town-defences; overall morphological unity of castle and town; a castle entrance that is aligned with a main street and opens directly onto it; a broadened street-space with associated plot-series; and a church or chapel, either located in the broad street or at the end furthest from the castle. Although the details of these may vary from one place to another, what is common between castle-towns is the unified nature of their plan-forms and the purpose for which they were designed. Castle towns thus share similar 'design contexts', in that they were primarily tools used by magnate lords in times of military conquest, when a partnership of defence and commerce was essential to reinforce political control of land and people. Although the documentary record is relatively quiet about this role of castle-towns, by identifying and comparing urban morphologies, and relating town-plans to available written records, it is possible to show that they were closely integrated with the military strategies of Norman magnates. To be more certain that towns and castles were intimately linked with periods of conquest will require excavations like those recently undertaken at Stafford castle which revealed the earthwork remains of a defended settlement located between the former castle-gates and the church of St Mary (see Higham & Barker 1992, 289-93).

Town Design and Colonisation: Orthogonal Plan-Forms

If castle-towns were associated with the initial stages of territorial control, what further changes took place in the design of towns in the high Middle

Ages? The plans of the castle-towns discussed above all show signs of continued urban development. One common characteristic, which can be seen in the plans of Alnwick, Ludlow and Haverfordwest, is the addition of larger market places, usually sited adjacent to the castle-town (see Figs 3, 4 and 5). Following the creation of castle-towns, therefore, it seems that new urban landscapes were designed with greater emphasis on commercial provision, perhaps to encourage more trade and traders. In England and Wales, this change in town-design occurs mainly after 1100, and may actually reflect a deliberate attempt by aristocratic elites to consolidate control over their territories. New town-layouts with large market-places, were accompanied by new bureaucratic systems of urban administration. This transition is reflected in an increase in borough charters which helped reinforce and legitimise the dominant position of aristocratic elites over trade and townspeople. The borough charter became a social and fiscal contract which effectively institutionalised the relationship between urban lord and townspeople, thus cementing townspeople and townscape on the premise of greater personal freedom. Another important change in town-design emerged during the mid-twelfth century with the development of sophisticated orthogonal plan-forms.

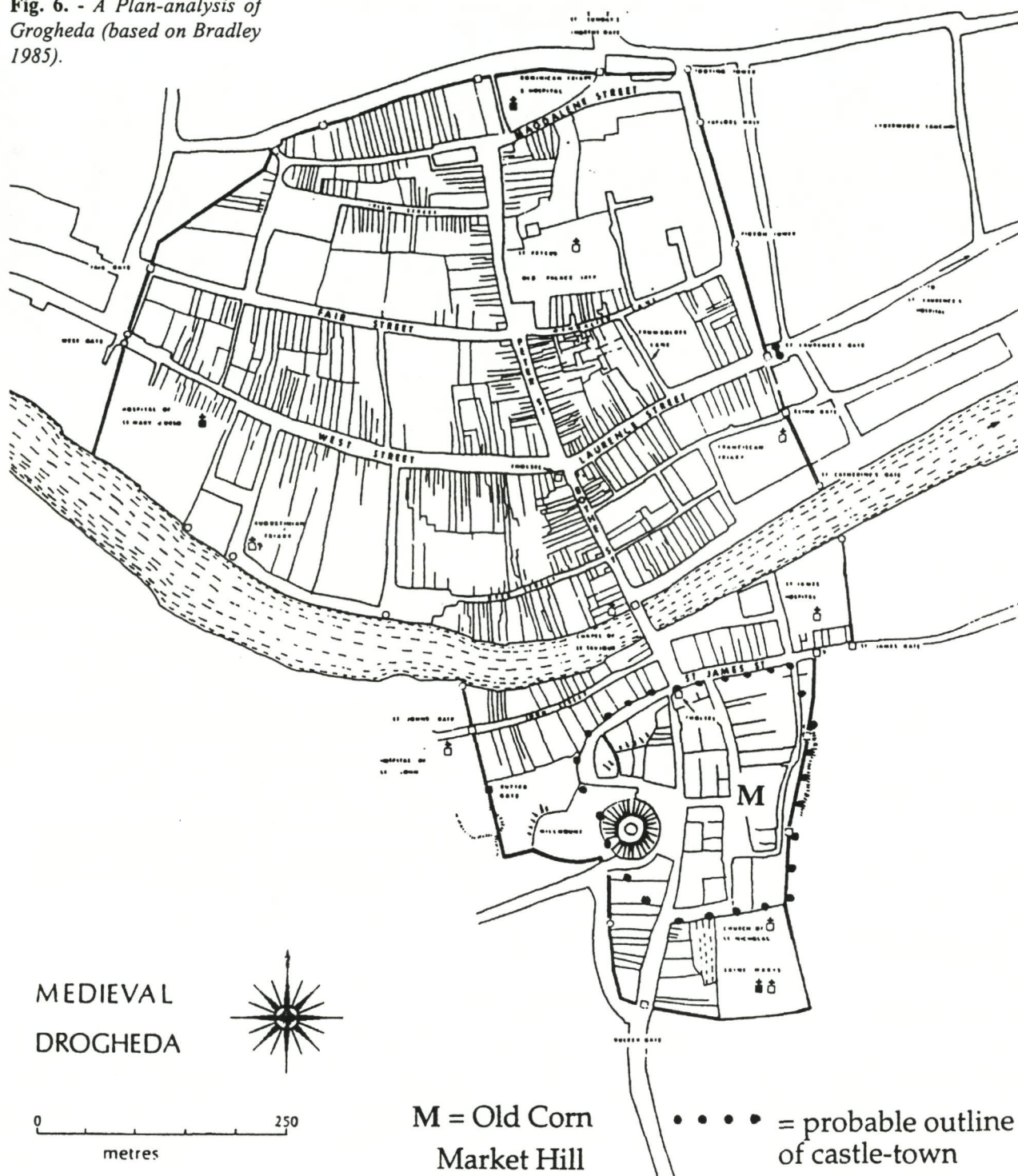
Medieval town-plans which show signs of geometry have long attracted the attention of modern scholars who have largely seen them as evidence for 'town-planning' (Tout 1917; Beresford 1967; Slater 1987). What is often not discussed is the reasons why geometrical designs were used in towns in the Middle Ages. Surely, the use of geometry in town-design relates to wider cultural changes? Although this issue has been explored in studies of later medieval town-planning, for example by Friedman (1988) and Lauret, Malebranche and Seraphin (1988), little has been done to decipher the geometries and symmetries of towns whose plans were laid out before c.1200. Here it will be argued that the use of geometrical principles in town design became more popular and sophisticated in England during the twelfth century, and that this change was associated with revived Classical traditions in mathematics and geometry. The final part of this paper will show how these orthogonal plan-forms of towns were increasingly used by aristocratic elites to further colonise interior and frontier lands across England, Wales and Ireland.

Orthogonal plan-forms are characterised by geometrical and symmetrical arrangements of streets and plots. In Britain, one of the most well-known examples of this form of town-design is an area of Ludlow which comprises Broad Street and Mill Street (plan-unit V on Fig. 4). The morphology of this part of

Ludlow contrasts with the patterns of surrounding streets and plots simply because it is so strikingly geometrical in form. Two main streets of broadly the same width run parallel to each other; mid-way between them is a third, narrower street, which intersects with a cross street to form four equal-sized street blocks. Both Broad Street and Mill Street are fronted by regular-sized plots, and the whole area seems to have been planned to slot into Ludlow's townscape, as if to maximise the number of properties within a piece of land left over from earlier stages in the town's development. The most likely context for the laying out of this area of Ludlow is the period following Walter de Lacy's successful siege on the castle, during the civil war of Stephen's reign, when houses were destroyed in the town (see Hathaway *et al* 1975, 10-20). Indeed, the area of plan-unit (V) was probably a piece of post-war reconstruction, laid out in the 1160s or 1170s. Elsewhere in England at this time, other town-plans were being extended in similar ways. At Coventry, for example, two parallel streets were laid-out in the Earl of Chester's park shortly after the end of the civil war, and between them spacious and regular plots were arranged (Lilley 1995) (plan-unit V on Figs 1 and 2).

At both Ludlow and Coventry, the two planned extensions clearly have geometrical designs and shared common morphological characteristics and temporal contexts. However, in these and other examples of high medieval town-planning the motives behind the designs are not recorded by contemporary sources. This means that the main source of information about the origin and purpose of orthogonal plan-forms has to be the geometries and symmetries of the designs themselves. One approach to this is to compare the morphologies of towns which were established *ex novo*. In recent work on medieval urban forms in central-southern England the layouts of five late-twelfth-century new towns were compared using detailed plan-analyses (Lilley, forthcoming). Three of these towns, Lymington, Newport and Yarmouth, were founded within thirty years of each other by a single aristocratic family, the de Redvers, on lands along the Solent estuary. All three towns have plans that display some element of geometry or symmetry, but despite having shared parentage, and similar spatial and temporal contexts, no two designs were the same. Instead of using a single 'blueprint' to plan their new towns, the de Redvers appear to have simply replicated certain design motifs. These motifs include the use of parallel streets, standard street-widths, centralised market places and uniform plot-patterns. The result of this is an urban landscape that looks formalised, controlled and regulated, and in this context it is not difficult to

Fig. 6. - A Plan-analysis of Grogheda (based on Bradley 1985).



see why such geometrical principles were being replicated in new-town designs across twelfth-century Europe.

Orthogonal town-plans offered certain benefits to town founders and urban lords. One advantage of laying out regulated urban spaces was that it facilitated economic and social regulation of townspeople and town-life. At about the same time as the de Redvers were founding their new towns along the Solent, Jean de Gisors was laying out his new *villa* of

Portsmouth (c.1180, *ibid.*). For this purpose, de Gisors used dimensions based on standard, statute measures. In his new town, axial streets were arranged in parallel and the plots between streets laid out to certain sizes. This precision-approach to town-design must have been used to help standardise and regulate urban property. Certainly, Jean de Gisors was not alone in using statute measurements and symmetrical designs, the same approach was employed in the late-twelfth century in episcopal town-planning ventures

in the English Midlands, for example at Stratford-upon-Avon and Lichfield (Slater 1987). By adopting geometrical principles of town design these urban lords, both secular and ecclesiastical, could calculate more easily the rents from their properties. Moreover, parallel street-patterns provided two plot-front-ages and made it easier to alienate urban properties. This spatial practice encouraged local entrepreneurialism amongst townspeople, with the financial dividends obviously going to the lord.

New towns were designed principally by entrepreneurial lords to make money, through developing commerce and gathering rents and fines, but they also relied on attracting people to settle and take-up properties (see Bartlett 1993, 177-82). Orthogonal town-designs provided a way of controlling this urban development in a sustainable and flexible way. Parallel streets could easily be extended to accommodate more properties, and hence more townspeople; geometrical plot-patterns were replicable and provided burgesses with fixed units of property which could be sold, exchanged, amalgamated or sub-divided; centralised market-places provided townspeople with a specific and visible focus for commercial activities as well as sites (and sights) of ceremony and spectacle. Ultimately, of course, the practical advantages of using orthogonal plan-forms reinforced the social and economic position of the town's founder (as well as their successors). Perhaps less obviously, new towns with orthogonal plan-forms also allowed, and indeed encouraged, an influx of people (migrants) and thus helped aristocratic lords to colonise interior and frontier territories. This 'colonial' impetus for town-founding is rarely acknowledged in modern literature on medieval urbanism, and yet the rise of geometrical principles of town-design can be shown to have relied upon territorial expansion: new forms of town-planning were not only made possible by territorial expansion, but made such expansion possible.

As well as being characterised by a renaissance of urbanism, the twelfth century saw a revival in Classical learning in western Europe (Haskins 1927). These two recurrences were by no means unconnected. In the early 1100s, an English scholar, Adelard of Bath, having travelled extensively around the Mediterranean, translated Arabic copies of Classical texts on geometry and mathematics, including Euclid's *Elements* (Burnett 1987; Busard 1983). The impact of these ancient texts on European medieval material culture is difficult to judge, but certainly in England the exchequer system under Henry II relied upon mathematics set out by Adelard, and in France geometrical principles were being used in the design and construction of new cathedrals during and after the

late-twelfth century (see Poole 1912; Gimpel 1983). Such practical use of geometrical and mathematical theorems presumably also lay behind the orthogonal designs of medieval new towns. Indeed, this link has been successfully demonstrated in a study of late-thirteenth and fourteenth century Florentine new towns (Friedman 1988). However, this link has not been used to account for why newly established towns of the twelfth century also show clear indications of geometrical design, yet it was precisely during this earlier period that a revival of Classical learning was taking place. Although more work is required on the geometries of twelfth-century town-plans, on the basis of existing morphological studies it seems highly likely that the widespread use of orthogonal plan-forms in new town foundations in Britain would have required some practical and theoretical knowledge of Classical geometry.

Revived Classical knowledge relied on between Latin countries and the Arab world, forged at a time when the expansionist policies of European aristocratic elites were having a profound impact on Levantine countries. There are also other, more subtle ways in which Classical geometry and medieval town-building were linked to territorial expansion. At a time when knight services were increasingly being commuted into cash payments to the English crown, and in a period when cash was needed to help sustain the burgeoning dominions of the Angevin empire (see Gillingham 1984), it is not surprising to see a rash of new towns being laid out in the later-twelfth century by aristocratic lords all across England, Wales and Ireland. Orthogonal town-plans offered these lords the advantage of socially and economically regulating their townspeople (see above), whilst also meeting the increased financial demands that were being placed upon them. Laying out new towns, or parts of towns, helped guarantee more regular cash income for both aristocracies and monarchies, and so support their political control of interior and frontier territories. An example of the spread of aristocratic power, from England to Ireland, is revealed by the activities of the de Lacy family and their development of towns at Ludlow and Drogheda during the last half of the twelfth century.

Both Ludlow and Drogheda, were shaped by geometrical principles of town-design. At Ludlow, the de Lacys appear to have re-colonised the town following the civil war of Stephen's reign by fitting a new area of streets and plots into an existing townscape (see above) (Fig. 4). They may have done this to re-establish control over Ludlow and their surrounding lands. Whatever the political motives for laying out Broad Street and Mill Street were however, the economic advantages are clear. Indeed, it could be

said that this area was cleverly planned to provide a maximum number of new plots within a relatively restricted part of the town. Geometrical knowledge almost certainly played a part in the surveying of this area, because without it the regular proportions of the street-system would have been difficult to establish (there is a possibility that the design of this area relied upon knowledge and use of chords, as set out in Adelard's translation of Euclid's *Elements*). By laying out new plots and streets, the de Lacys were promoting what may be termed 'interior colonisation'. Similar objectives are revealed in the family's further development of their castle town at Drogheda in Ireland. In the 1190s, an extensive area to the north of the River Boyne was laid out with an orthogonal pattern of streets and plots, probably by Hugh de Lacy (Dargan 1996, 267) (Fig. 6). Despite sharing the same parentage, the design of this planned area in Drogheda bears no direct similarity to the arrangement of streets and plots laid-out at Ludlow, although the two town-designs do share a common use of geometry and symmetry (as was the case with the de Redvers's towns, see above). The de Lacys' likely motives for laying-out a new area of Drogheda was to help attract people to their newly-acquired Irish lands, and so promote 'frontier colonisation'.

The changes in the development of Ludlow and Drogheda have to be seen in the broader context of political expansion under Angevin kingship, and the struggles taking place in the late-twelfth and early-thirteenth centuries between the monarchy and Anglo-Norman aristocracy. Interior colonisation, either by the extension of old towns or the creation of new ones, provided aristocratic families like the de Lacys, the de Redvers and the de Gisors, with opportunities to raise incomes and control their lands. With frontier colonisation, new markets were created and, through the creation of new towns, controlled. Interior and frontier colonisation were obviously interconnected; for example, it cannot be mere coincidence that the de Redvers were developing *three* new towns along the Solent when, at the same time, the nearby port of Southampton (and later Portsmouth) was being used to supply shipments to new English territories in Ireland (see Lilley, forthcoming; Clarke, forthcoming). In both frontier and interior contexts, orthogonal town-designs offered a profitable way of accommodating large influxes of new people. Perhaps geometrical designs were also used by lords to symbolise their power, not only over people and culture in a material sense, but over landscape and nature. The ordering of urban space through design may have reflected medieval cosmographies, particularly the idea that Jerusalem was the centre of the world. The plans of the three de Redvers towns were all orient-

ated east-west, and at Drogheda and Ludlow the geometrical designs are closely aligned with the cardinal points. Such reverence may reflect the attitudes and perceptions of twelfth-century town designers, about whom very little is known. Perhaps, as in France, the architects of cathedrals, with their knowledge and practical use of geometry, were employed to design new towns (see Gimpel 1983, 121).

Overall, in the century after c.1150, the plans of towns in England, Wales and Ireland reveal a clear shift from military to commercial considerations. This seems to be commensurate with and contingent upon new orthogonal forms of town-design, based on increased knowledge and practical use of Classical geometry and mathematics. These morphological changes are also intimately connected with a broadening in the horizon of colonised lands under Angevin kingship. In the thirteenth century, this process continued and is clearly reflected in the policies of Edward I, who used new towns with orthogonal plan-forms to help colonise and control English-held lands in north Wales and Gascony (Beresford 1967).

Conclusions

The purpose of this paper was to show how the designs of certain medieval towns reflect the intentions of their creators, and to demonstrate how these urban morphologies may be read as a contested discourse of 'medieval colonialism'. Three significant changes in town-design have been identified and these reflect different stages of internal and external territorial expansion. First, castle towns were used during periods of military conquest, combining commerce with defence to secure a foothold on newly-acquired territories. Second, large market places were subsequently added to castle towns to facilitate further commercial expansion and consolidate political control of a territory. Third, geometrical, or orthogonal plan-forms were used to establish new urban spaces which could be used to accommodate influxes of new townspeople and offer them entrepreneurial opportunities.

In Table 1 an attempt is made to conceptualise these different stages of territorial expansion, and some speculative dates attributed to the changes in town-design. Although these three different design-contexts relate specifically to the activities of aristocratic elites in England, Wales and Ireland between the eleventh and thirteenth centuries, equally similar transitions in town-design can be identified elsewhere in medieval Europe (see Friedman 1988). Further comparative work using morphological ap-

proaches should help to either reinforce or contradict the interpretations of plan-forms offered in this paper. The advantages of using plan-analyses to map the changing designs of medieval towns are nonetheless apparent. This technique of combining written and unwritten records of townscape change provides a suitable basis for comparative work on European medieval towns, particularly in periods and places where documentary information is relatively sparse. There is also an opportunity to use this approach to compare processes of 'medieval colonialism' (and the role that urban spaces played in shaping colonial enterprise) with more recent periods of conquest and colonisation. For example, research into French colonial activity in Algeria has revealed how an initial military conquest was transformed into a general colonisation between 1830 and 1950; and work on Guatemalan settlement has shown how new villages with geometrical forms were used by military authorities in a programme of internal colonisation in the 1980s (see AlSayyad 1992, 183-210, 289-313). Similarities and parallels between different periods of colonialism may help inform us about the difficult and often neglected role that medieval towns played in the creation of modern Europe.

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Appendix:

Mapping Medieval Urban Landscapes: a methodological summary

This appendix is intended to give some guidelines for morphological analysis and representation and so clarify the plan-analysis methods used above. This approach is divided into four main stages:

1. The first stage of morphological analysis requires the construction of a base plan. For this the earliest, detailed Ordnance Survey (OS) plan is used, usually at a scale no less than 1:2500. These plans were first surveyed in the mid-nineteenth century, so earlier maps and plans are used to help identify and strip away obvious post-medieval redevelopments, such as new streets, railways, factories, etc. The OS plan is simplified to show only three *plan-elements*, streets, plots and buildings: collectively, these combine to form the *town plan* in a strictly morphological sense. This town-plan may then be analysed further:
2. Stage two involves defining *plan-units*. These are areas of morphological homogeneity identified from the town-plan. Each plan-unit should be delimited by using *plan-seams* and numbered sequentially. The plan-units reflect, hypothetically, a phase or stage in the morphogenesis of a town's plan, and each one may have first originated sometime in the medieval period. To examine this, the plan-units are used as the basis for analysing other evidence for townscape change, taken from both written and unwritten medieval records:

3. The third stage is complex and requires carefully integrating historical material and mapping this onto the plan-analysis, plan-unit by plan-unit. This means, first, using medieval deeds and rentals to piece together sequences of urban property patterns, and plotting these, as well as archaeological information derived from excavations, onto the base-plan. An attempt is made, therefore, to *locate* topographical information that relates specifically to the medieval townscape. These historical sources are then, secondly, interpreted to provide a relative chronology for the morphogenesis of each individual plan-unit; this requires using the plotted, historical material to *date* certain townscape features (such as defences, ditches, buildings, etc). By the end of this stage, the morphological history of each plan-unit has been carefully mapped (i) to show the likely form of the medieval townscape (its streets, plots and buildings); and (ii), to show what morphological changes had taken place within the plan-unit during the Middle Ages.

4. Finally, the individual plan-units, and their morphological histories, are pieced together to form a narrative of urban change. This means interpreting, or reading, the plan-units as physical expressions of changing town design, as well as broader reflections of cultural and social change. An attempt is made to show what the different forms of townscape may represent. This is especially important in medieval contexts as so few contemporary sources provide information about how people shaped urban landscapes. Since changes in town designs reflect the needs and desires of those who were initially responsible for creating them, as well as processes of contestation and negotiation between different levels of medieval society, morphological analysis and representation provide a way of conceptualising medieval urbanism, and show that the design of towns in the Middle Ages was a sophisticated social and spatial practice.

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